A Guidebook for Managing Telecentre Networks: Engineering a New Phase of the Telecentre Movement/Print version

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Jump to: navigation, search

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Contents

[hide]

[edit] Preface

A collaborative project of the telecentre.org community

Edited by Meddie Mayanja, Manuel Acevedo, Silvia Caicedo and Claire Buré

(Wikified by Bangladesh Open Source Network with support from Partha Sarker)

A Guidebook for Managing Telecentre Networks Front Cover

A Guidebook for Managing Telecentre Networks Back Cover

A ***printable version*** of A Guidebook for Managing Telecentre Networks: Engineering a New Phase of the Telecentre Movement is available. 1,950 kb (edit it)

Telecentre (noun): A Telecentre is a public place where people can access computers, the Internet, and other digital technologies that enable them to gather information, create, learn, and communicate with others while they develop essential digital skills. While each Telecentre is different, their common focus is on the use of digital technologies to support community, economic, educational, and social development—reducing isolation, bridging the digital divide, promoting health issues, creating economic opportunities, and reaching out to youth for example.

Telecentres exist in almost every country, although they sometimes go by a different name: public Internet access center (PIAP), village knowledge center, Infocenter, community technology center (CTC), community multimedia center (CMC), multipurpose community Telecentre (MCT), Common/Citizen Service Centre (CSC), school-based Telecentre, etc.[1]

[edit] Table of contents

[edit] References

1. ↑ Wikipedia definition of a "Telecentre" http://en.wikipedia.org/wiki/Telecentre October 29, 2009, 18:16 GMT

[edit] Acronyms

Acronyms

AED	Academy for Educational Development
ATN	Associação Telecentro de Informação e Negócios (Brazil's Telecentre Information and Business Association)
BCTN	Burundi Community Telecentre Network
BoP	Bottom of the Pyramid
BTN	Bangladesh Telecentre Network
CAICC	Centro de Apoio à Informação e Comunicação Comunitária (Community Information Communication Support Centre)
CeC	Community eCenter
CRID	Rural Center of Digital Inclusion in Brazil
CTSP	Microsoft's Community Technology Skills Program
FATEMA	Federation des Telecentres du Mali (Federation of Telecentres in Mali)
GCC	Global Communication Center
ICTA	Information and Communication Technology Agency of Sri Lanka
ICT4D	Information and Communication for Development
IDRC	International Development Research Centre

IKB	Information and Knowledge Base
IRRI	International Rice Research Institute
ITU	International Telecommunications Union
KenTel	Kenya Network of Telecentres
KM	Knowledge Management
KS	Knowledge Sharing
M&E	Monitoring and Evaluation
MSN	Microsoft Network (Messenger)
NCC-ICT	National Computer Center of the Commission on ICT
NGO	Non-Government Organization
OVOP	One Village One Portal
PhilCeCNet	The Philippine Community eCenter Network, Inc.
RKB	Rice Knowledge Bank
RTN	Rwanda Telecentre Network
SDC	Swiss Agency for Development and Cooperation
SME	Small and Medium Enterprise
TASA	Telecentre Association of South Africa
TCN	Telecentre Network
TTN	Tanzania Telecentre Network
UEM	Eduardo Mondlane University (Maputo)
USAID	United States Agency for International Development
KEC	Knowledge Exchange Conferences
tPCA	telecentre.org Philippine Community eCenter Academy
CeCNet	Community eCenter Network of the Philippines
TBI	Telecentres of Business and Information in Brazil
UNDP	United Nations Development Programme
UNV	United Nations Volunteers
WSIS	World Summit of the Information Society (Tunis, 2005)

[edit] Figures, Boxes and Tables

Figures, Boxes and Tables

[edit] Foreword

Foreword

I am heartened that telecentre networks have immortalized what they have learned from experience about network building and management since 2005, especially because there is no longer any dispute: networks are the new normal for organizing and managing telecentres successfully. As such, this initiative represents a major contribution by and for networks, as well as for the global telecentre community at large.

The resulting Network Management Guide addresses practical issues that networks face on a daily basis. It discusses the challenges and proposes solutions from the practitioners' perspectives. As a living document, constantly updated through wiki posts, the guide encourages the telecentre community to engage in building stronger telecentres together and to share experiences and perspectives for many years to come.

I would like to thank the network leaders and practitioners who dedicated their time to write the various chapters in this guide. They are: José Avando Souza Sales (ATN Brazil), Sulah Ndaula (UgaBytes, Uganda), Aminata Fofana (Afriklinks, Mali), Mahmud Hasan (Bangladesh Telecentre Network), Maria Teresa M. Camba (PhilCeCNet, Philippines), Kemly Camacho (Sula Batsu, Costa Rica), Paula M. Carrión (Infodesarrollo, Ecuador), and Manuel Acevedo (ICT4D consultant, Argentina). I extend my deepest appreciation too to the members of the telecentre.org community that reviewed and provided useful feedback to these authors.

This guide was co-edited by Manuel Acevedo (Argentina), Claire Buré (Chile), Silvia Caicedo and myself (telecentre.org, Canada). It is published by telecentre.org (www.telecentre.org) and is available online and (coming soon) as a living wiki. Finally, this guide represents the very best of what telecentre.org and the telecentre movement is all about: working together to share experiences and best practices with a view to making telecentres strong, better, more sustainable and more relevant to the people they serve.

Congratulations. I'm proud to be and work in your company.

Meddie Mayanja

Senior Program Officer

telecentre.org

[edit] Chapter 1. Introduction: A new publication about Telecentre networks

[edit] Introduction: A new publication about Telecentre Networks

Manuel Acevedo Ruiz

Community telecentres, or simply 'telecentres' as they are widely known, have existed since the mid 1980s in Scandinavia, Canada and the United States – for almost as long as the internet has been available to the general public. They became more widespread in the late 1990s with their deployment in developing countries, as the strategic importance for human development of universal access to information and communication services became more accepted by policy-makers around the world. In 1997, the United Nations called for universal access to ICT services:

> We have concluded that the introduction and use of ICT and information management must become an integral element of the priority efforts by
>
> the United Nations system to promote and secure sustainable human development for all; hence our decision to embrace the objective of establishing universal access to basic communication and information services for all (UN Administrative and Coordinating Committee).

In many countries in the world, the only viable way to reach universal access for the time being and in the mid-future is though shared access, particularly for people who are impoverished. As C.K. Prahalad notes[1]:

> The search for a solution to this problem has focused on different forms of shared access, in which public computers are made available in
>
> supportive environments, usually with the user paying only for the amount of time he or she uses it. The actual models under which this
>
> approach is organized are as diverse as the bottom of the pyramid itself, but for the sake of simplicity, it is called telecentres (in Fillip & Foote, p. i).

Since the mid 2000s a new player for universal access has arrived on the scene: the mobile phone. And it is the only imaginable digital device connectable to the internet that can bring universal ICT access in the foreseeable future (individually or even at the family level). Yet, while their capabilities are growing by leaps and bounds, mobile phones still present significant limitations (small screens, restricted inputs, high costs for connectivity, etc.).

This points to a different, more integral understanding of the meaning of universal access. Just as the concept of 'digital divide' evolved from being strictly related to infrastructure to one combining infrastructure, capacity and content (Acevedo, 2005), we can talk of 'effective universal access' which isn't just about devices; but rather integrates devices, goods, services and context to allow people to make effective use of ICTs. Telecentres continue to play a key role in allowing greater levels of connectivity, becoming even more important as the diversity and complexity of ICT goods and services grows. Telecentres help constituencies to gain ICT capacity, to find relevant content, to make use of a growing range of services and to connect with other users (across towns or across the world), all within the 'supportive environment' outlined earlier by Prahalad. Therefore, as telecentres are shifting to becoming community resources for human development, reaching beyond their initial recognition as technology access points, they will be increasingly recognized as fundamental actors in spreading the benefits and opportunities of ICT use[2].

Once the first telecentres were launched in a given country, particularly in developing nations during the mid-to-late 1990s[3], some practitioners and policy makers turned their attention to how to bring those telecentres together so they could share experiences, information, training materials, etc. Low performance caused many 'early casualties' among the first waves of telecentres. Telecentre networking became an important issue, at least on paper, even before large national scaling-up of telecentres started. But it wasn't easy and it would take time.

Up until a few years ago, most telecentres were fairly isolated from one another. Even national initiatives that were born with the intention of being networked, such as in Jordan starting in 2000, essentially functioned as individual telecentres which only shared program managers and funding. Even discussions among national telecentre associations (mostly in Latin America) in December 2001 on the eve of a Global Citizens Networks Congress in Buenos Aires did not lead to any significant results or advances. However, this event probably did help to pave the way towards more extensive networking, a way that was significantly facilitated by the strings of meetings and contacts made possible by the process of the World Summit on the Information Society (2003 – 2005). It was really with the start of the

telecentre.org initiative (starting in 2006) that significant advances in telecentre networking were realized, via an open, organized and deliberate effort that was global in scope and reach.

[edit] How do we recognize a telecentre network when we see one?

Is it possible to provide a unified definition of a telecentre network (TCN)? Perhaps, but since the nature of this publication is more practical than academic, we prefer to characterize telecentre networks through the attributes that commonly appear. After all, telecentre networks can vary significantly from country to country: sometimes they are informal arrangements, linking a few dozens of telecentres, while others are highly structured national programs that include hundreds of individual telecentres.

Meddie Mayanja, from the telecentre.org program initiative, provides a description of some of the key attributes of a telecentre network:

- An **alliance of practitioners** (who believe in the power of working together to learn and find solutions for their problems);
- **A forum for exchange** of ideas and experiences; and
- A **platform for actio**n to increase social and economic impact of grassroots telecentres (Mayanja, 2008).

In addition, we could say that a telecentre network fosters the collaboration of telecentres, helps to represent them and channels their voices, also serving as a dynamic repository of resources for its member telecentres. More broadly, networks strengthen the entire telecentre ecosystem — acting as connection points between key players and sustaining relationships between activists, researchers, and development partners.[4]

Some network parameters, applied to telecentre networks can help to characterize them, include the following characteristics:

- **Size:** Networks can consist of up to 100 nodes, 100 – 500, over 500;
- **Regional coverage:** Can be local, state/provincial, national, regional, global;
- **Maturity:** Can describe stages from 'infancy' (up to 2 years),'adolescence' (2-4 yrs), and 'adulthood' (after 5 yrs)[5]
- **Institutionality:** Can range from formal to semi-formal to informal.

Most telecentre network practitioners will find their network's characteristics among the attributes mentioned. Other network characteristics and behaviours are described in more depth in Chapter 10.

[edit] But what exactly do you mean by a 'network'?

Networks are currently fashionable. Everyone is in a network (or sometimes in many), and all sorts of organizations describe themselves as 'networked'. We may even take networks for granted, given their ubiquity. But as it happens with other all-too important concepts, such as 'quality' or 'excellence', the concept ends up devoid of meaning. As Kilduff and Tsai (2008) note:

> *Sometimes it appears that the network paradigm is in danger of becoming a victim of its own success – invoked by practically every organizational researcher, included in almost every analysis, and yet strangely absent as a distinctive set of ideas (p. 9).*

It is thus appropriate to briefly pause in order to convey a common understanding of the concept of a network, without going into theoretical vagaries. If we are going to talk, analyze and make

decisions about networks,t is worth thinking about what it actually means, even while recognizing that there are numerous interpretations of what a network entails. At its most basic level, a network can be understood as set of connected nodes. The nodes interact via some type of connection or channel: it could be an electronic link, or a 'physical' chat while having tea. Each node and connection can exhibit different characteristics. For example, nodes may vary in terms of

responsibility or influence, while connections may differ in intensity or in terms of the transactions they allow[6].

The '**connected**' attribute is fundamental. A network exists as long as there is interaction among its nodes, be they persons, units or organizations. The interaction can take various forms: information sharing, transactions, projects, campaigns, etc. Just like a bicycle needs constant movement to stay upright, so does a set of nodes need to be actively connected in order to constitute a network. In other words, some nodes in a network will be acting together at any given time. Otherwise they simply make up what we can generally call a 'group', for reasons of identity, interests or affinities. We can express this as a simple formula: **Network = Group + Joint Activities**.

Networks do not particularly need a centre, though they often have one or more sets of concentrated nodes that can be called 'hubs'. In comparison with more traditional or hierarchical organization structures, networks tend to be more flexible and modulable. They may also be more efficient, such as for the distribution of information.

As will be mentioned in the final chapter, there are various ways to describe or characterize networks, with associated techniques to analyze them. For now, it is helpful to distinguish between **social networks** (those between individuals) and organizational networks (those between or within entities, the latter when they are large). **Organizational networks** typically have one or more explicit purposes, while social networks chiefly serve to communicate between people. Additionally, an organizational network displays a productive nature; it produces something concrete (making it more than a set of contacts). Telecentre networks can, for these reasons, be described as organizational networks.

[edit] Telecentre networks, ecosystems, or what...?

For practical purposes, it is worthwhile to extend the view of a telecentre network to that of a telecentre ecosystem, a term coined by telecentre.org in 2006. A telecentre ecosystem recognizes actors both within and outside the telecentre network, as Figure 1.1 illustrates below.

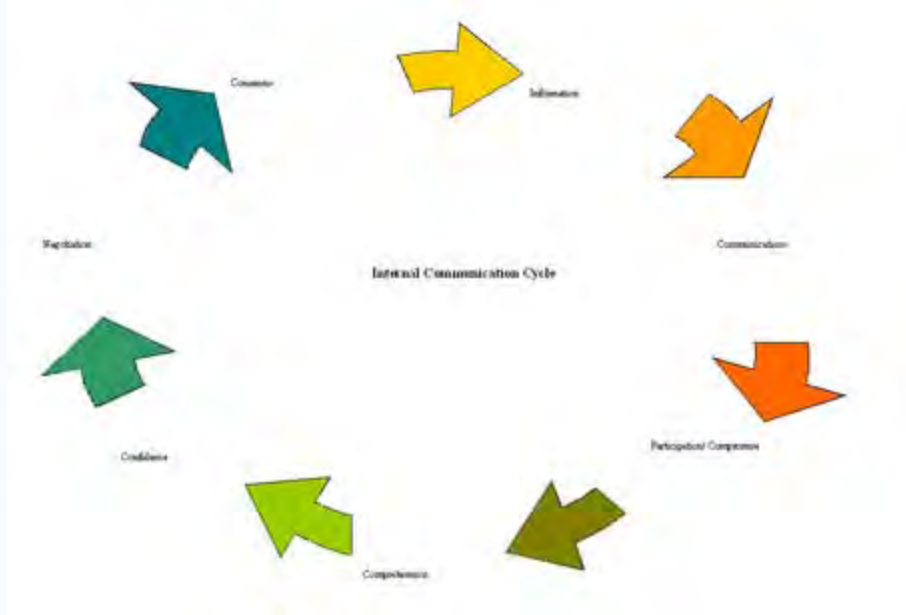

Figure 4.1 Internal Communication Cycle

A narrow view of a telecentre network would only include telecentres, leaving out other relevant actors (like universities, or a municipal administration, for example). A more accurate, open view would include these outside actors as well, in an broader telecentre network. After all, network geometries are based more on collaboration than strictly on nodal identity: it is more important what do you do than who you are. It is this second, more open interpretation of telecentre networks that will be used in this Guidebook, recognizing non- telecentre actors as another type of node that can participate in network activities in various ways. This topic will be covered in greater detail in the next section under 'Other actors in telecentre networks'.

If a telecentre network could be seen as a club, what is important here is not whether we would formally initiate non-telecentre actors as 'full members with voting-rights' or whether we grant them only with temporary passes to the club. What matters is to realize their potential for collaboration in order to achieve the objectives of our telecentre networks.

Currently, national governments, businesses, international organizations and civil society are the protagonists in the telecentre movement. Generally speaking, governments tend to lead the development and implementation of public policies in ICT, while the private sector enables and finances actions aligned with their corporate strategies. International organizations (as represented by UN agencies like the United Nations Development Programme, UNESCO or the International Telecommunications Union, development banks or by entities such as the International Development Research Centre (IDRC) in Canada bring resources and share knowledge for better management of telecentre networks. And in a growing number of cases, it is the responsibility of civil society to manage telecentre networks.

[edit] Others actors in telecentre networks

As mentioned before, telecentre ecosystems can include many different kinds of entities that can contribute to and become active within telecentre networks, acting as nodes in those networks. Let's take a look at their possible roles now, while keeping in mind that networks can always benefit from the contributions of additional genuine supporters.

- **Universities:** Universities provide the skills for future engineers, managers, doctors, sociologists and other professionals in a country. They also help to educate people to be citizens in a more harmonious society. Given this double motive, universities are well placed to be important partners for TCNs. A national collaborative arrangement would benefit from having students hone their ICT technical skills while supporting telecentres as a work placement (such as through a summer job, or an internship) or online, by providing help desk support, for example [7]Students and professors can also help to provide or adapt training content in thematic areas of interest to telecentres (relating to agriculture, health, trade, civil rights, etc.). Universities can also help conduct valuable research for telecentre networks, which few other institutions may be in a position to do.

- **Businesses:** As part of their Corporate Social Responsibility programs, or even without them, companies can contribute to the operations of a telecentre network. They can provide technical/management expertise, equipment, connectivity and, very importantly, the collaboration of corporate volunteers. Companies can also facilitate the entry of TCNs into specific development projects they are involved with. ICT companies such as Microsoft, Telefónica or Cisco (or smaller ones) can play valuable roles.

- **Development agencies/ Development NGOs:** Both multilateral entities (such as the UNDP, UNESCO, ITU, IDRC, Soros Foundation) and bilateral entities (the UK's DFID, Swiss SDC, or Spain's Intermon-Oxfam), have supported the telecentre movement for years, and continue to play significant roles. One good example was the ITU with their 'Multipurpose Community Telecentres'[8]. These organizations are well placed to examine experiences around the world, and together with telecentre practitioners, distill knowledge that can be applied to advance the work and performance of these networks.

- **Media:** With the advent of a web 2.0 internet environment, media channels have multiplied and extended their reach to new communities. The media can provide special types of contributions to telecentre networks: (i) increasing the visibility of telecentres for the general public and specialized audiences, (ii) strengthening the public communications capacity of TCNs, and (iii) enriching the role of telecentres as consumers/providers of news and information flowing through media change.

- **Governments:** The myriad of possible contributions of public administration to telecentres and telecentre networks is well recognized. What is worth mentioning here is that their participation as (powerful) members of telecentre ecosystems can occur simultaneously atnational levels (ie. with telecentre networks) or locally, with municipal administrations providing support to local telecentres. One particularly interesting area of government involvement in terms of content and services would be to impulse large-scale e-government service initiatives where telecentres are utilized as the main means of delivery.

As we will see in Chapter 10, effective telecentre network management can help to arrange and map the contributions of these non-telecentre actors to obtain joint virtuous network effects. For this, careful consideration needs to be exercised in relation to (i) each actor's possible functions, (ii) TCN management aspects (as covered in Chapters 2-8) and (iii) the collaborative actions between them (such as between an ICT business consortium and a national university). The key aim is to derive added value from their participation, while avoiding a multiplicity of isolated contributions.

[edit] Why do telecentre networks matter?

Regardless of a telecentre network's specific characteristics, most practitioners have an instinctive sense of its benefits for a given telecentre, as well as for the 'community', (ie. the network entity itself), which will include some of the following:

- Pooling of financial and technological resources – for example, being able to negotiate better connectivity costs;
- Improved access to knowledge and information;
- Wider distribution channels for content and services;
- Enhanced collaboration – for exmple, in undertaking a joint project among a number of individual telecentres;
- Decentralized orientation – such as implementing collective decisions through coordinated actions at the local level;
- Mutual support and risk reduction – such as when facing financial blackouts from donors or unfriendly legislation;
- Support for smaller players (not all telecentres have similar structures or 'health');
- More flexibility, from the nature of functioning as a network (as opposed to a mere association of telecentres); and
- More effective representation stemming from a stronger capacity to interact with higher order entities, like a government. For example, interacting with a government's ministry to influence national ICTn policies with socially inclusive measures – which could never be achieved by a single telecentre or even a loose group of them.

From experience, practitioners know that participation in such networks involves a cost in terms of time, human resources and to some extent, money. The challenge lies in achieving the expected benefits from participation in a network in ways that outweigh the costs.

These benefits will not emerge spontaneously, and even if they did, they would be limited and ad-hoc. Networks are not self-managing; there is no kind of automatic pilot that keeps them going without intervention. Network management of any type (including for telecentres) is a relatively new style of management. Its added difficulty is that most of us were brought up in more hierarchical or traditional environments (whether in school, at work, in the family or in society at large). Most of the time we use 'trial-and-error' to come up with appropriate strategies and practices to help our networks reach the potential we intuitively think they have. These reasons lead us to try advancing our understanding of telecentre network management, the main theme of this document, with its specific issues and factors.

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[edit] A brief story on telecentre.org

telecentre.org is a worldwide network of people and organizations committed to increasing the social and economic impact of tens of thousands of grassroots telecentres by making telecentres stronger, more vibrant, and better at what they do. It helps to fuel a global movement that helps people in communities in every corner of the world join the knowledge society on their own terms. By investing in the networks and organizations that work directly with telecentres, telecentre.org makes a difference around the world, helping to improve communities and empowering people.

The telecentre.org program initiative was launched in November 2005 at the World Summit on the Information Society in Tunis. It is the product of a joint social investment program by the International Development Research Centre (IDRC), Microsoft and the Swiss Agency for Development and Cooperation (SDC). The program provides grants and technical assistance to telecentre networks and organizations around the world. Currently housed at the IDRC in Ottawa, Canada, key functions of the social investment program are increasingly being carried out by partners around the world.

But telecentre.org is much more than a social investment program. It is a community that gathers people and organizations from around the world who believe that telecentres have an important role to play in development. This group is made up of telecentre managers, network leaders, nonprofit and civil society organizations; corporations, governments and international development agencies — all working together to increase the social and economic impact of grassroots telecentres around the world.

Telecentre networks are the nerve and connectors of these complex web of interdependent relationships aimed at helping telecentres to create stronger social and economic impacts in communities they serve. Partners share experiences, skills, innovations and resources.

telecentre.org: We are…

One global community of more than ***200 networks*** and
organizations that work with ***80,000 grassroots telecentres***

Spread over ***70 countries***
reaching ***40,000,000 telecentre users***

One virtual community with ***3000 + online members*** interacting in
English, Spanish, French and Arabic.

We Have…

Held ***100 face-to-face events*** for people and organizations
involved in telecentres to ***share, learn, innovate and grow***

Helped produce and share content and services that local communities
want for ***development*** and telecentres need for ***sustainability***

Stocked our community websites with the
world's ***largest collection of photos and videos*** and its
most complete resources on all things telecentre

Created the telecentre.org Academy to provide
professional development training that improves telecentre performance.

Worked in ***20 developing countries*** to build research capacity
We put our research to work in the service of the telecentre movement

Influenced public policy and used our brand to leverage more than
$3 million to make telecentres ***stronger, more sustainable and more numerous.***

We Will…

Train ***one million knowledge workers*** by the year 2015.

telecentre.org doubles as a development project on ICT4D and as a network in its own right. And for the purposes of this guidebook it has the advantage of being familiar to many people who form part of telecentre networks around the world.

telecentre.org implements its activities in four main programmatic pillars; namely, **Research, telecentre.org Academy, Content and services and Networking**. It considers capacity building and knowledge sharing to be crosscutting themes. telecentre.org deliberately exploits the virtuous network effects of these pillars, as in most cases they complement and fortify the others. Figure 1.2 illustrates the relationship among these program components, which can be described as 'symbiotic' (Mayanja, 2008).

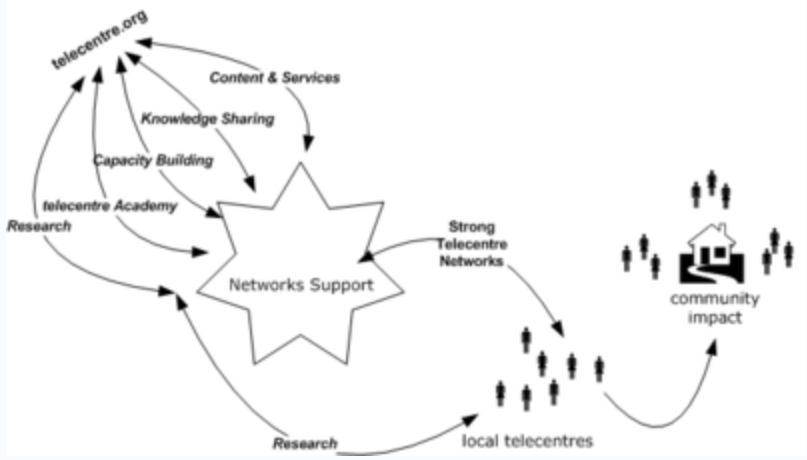

Figure 1.2 Network strategies and other telecentre.org program pillars

The ‘Network’ pillar of telecentre.org is critical to the overall success of the program. The national and regional networks that it supports provide a trusted channel to grassroots telecentres, who are the ultimate beneficiaries and stakeholders of the telecentre.org program.

telecentre.org therefore takes a double-pronged approach to networking: on one hand, it tries to mainstream networking across all its program areas. On the other hand, it includes a specific networking component to stimulate and fine-tune networked operations.

[edit] Another book on telecentres...?

The telecentre.org program had in fact already previously made a strategic decision to throw its weight towards supporting TCNs[9]. Its ‘Network Development Support’ strategy is aimed at obtaining technical support for institutional development and sustainability planning of TCNs. This guidebook is one of the products of that strategy. This is coherent with the strategy shown by its parent organization, IDRC, in supporting development networks of many types.

A resource document providing systematized information and proven knowledge about networks is imperative to help us get the most out of telecentre networks, so that individual telecentres can better serve their users and communities. This is the primary reason that led the men and women who attended the Telecentre Leaders’ Forum in Kuala Lumpur in December 2007 to advocate for the publication of a document about effectively managing telecentre networks. Appropriately, these same individuals requested the networked organization of which they are now a part.

While there is already a sizable and substantive bibliography about telecentres[10](of which a selection is included in this publication), few works can be found that focus on telecentre networks. Of those, fewer still concentrate on managing those networks.

The guidebook is the first publication dedicated exclusively to telecentre network management. It is not just another publication about telecentres: it is about how effectively create and thrive in

networks. We hope it will be a useful resource to better structure and handle telecentre networks for its target audience, which includes (i) people managing a telecentre network, (ii) managers and operators of telecentres that belong to a network; (iii) managers and operators of telecentres which do yet belong to a network; (iv) organizations that provide services to telecentres; and (v) ICT/information society policy makers. We'll be glad as well if it provides food for thought to anyone interested in telecentres and development networks.

There are additional reasons for the creation of this guidebook that deserve mention here. First, it is the product of a collective undertaking in which the key authors are all telecentre network practitioners. These are highly experienced people who are presently running a telecentre network or are closely linked to them: in other words, these are people who – day in, day out – are solving problems and expanding opportunities for telecentre networks. It is a publication based entirely on on-the-ground experience.

Second, it represents an important opportunity to bring applicable knowledge from network theory to the development field; so that NGOs, aid agencies and other actors (such as individual telecentres) can start to apply it in their own operations to improve results and outcomes. This has rarely been done in the past, and it will be beneficial as we enrich and complement practice with useful theoretical aspects.

Finally, and more broadly, human development processes need to be coherent within the context of the 'information society', or as sociologist Manuel Castells terms it, the 'network society' (1998). If we are living in such a networked environment, it is essential to understand its structures, processes and power relations, so as to conduct our activities more effectively within it. Currently, emerging networked cooperation schemes are overcoming traditional North-South (one-way) cooperation flows; instead creating more South-South flows (as well as South-North ones).

[edit] What can i find in this guidebook?

This guidebook contains nine chapters, aside from the introduction, which are briefly described ahead. Chapters 2 – 8 each discuss a specific topic of interest relating to telecentre networks, while Chapters 9 and 10 provide a unifying glance at previous chapters, while suggesting ideas on moving forward.

The themes were chosen in consultation with telecentre network managers and staff. They focus on key relevant topics, providing a strong foundation (and expected guidance) to help those responsible or deeply involved with a telecentre network. More topics will be added in subsequent versions of the guidebook, particularly as it will provide the basis of a wikibook soon after its publication so that the telecentre.org community and others involved with telecentre networks can help to enrich and expand it.

Each of the seven thematic chapters are presented using the same structure; namely: (i) a descriptive section, where the main aspects of the topic in question are discussed; (ii) a case study, where some of those aspects are examined in a real life scenario; (iii) a list of quick tips,

running down the key points to bear in mind about that theme; and (iv) a number of references to outstanding reports, web resources or organizations.

Network Governance (Chapter 2): Properly managing telecentre networks, as for any other organizational (or institutional) networks requires structuring and planning. Network management does not occur in a vacuum, and rarely yields good results if approached in ad-hoc or spontaneous manner. Core successful attributes and practices of TCN governance are discussed, while other aspects which could also be considered part of telecentre network governance such as participatory schemes and monitoring and evaluation, are covered in separate chapters for the sake of clarity.

Participatory Networks (Chapter 3): A fundamental pillar of telecentre network governance is participation, which should always relate to the network's objectives. A healthy TCN should offer fertile ground for effective participation and networked collaboration. This implies the need for certain management practices, cultural factors as well as adequate tools. For instance, effective knowledge sharing depends on the level of participation and nature of the network itself.

Communication Strategies and Practices (Chapter 4): Telecentre network communication strategies should cover at least three domains. One is the wider public, which for telecentre networks often means the national level. Another refers to membership, where individual telecentres act as nodes of the network. Finally, and no less importantly, is the communication supporting the telecentres' relationship with the communities they serve. Strategies and practices for this 3-D communication space are explained in this chapter.

Financial Sustainability (Chapter 5): One of the most recurring issues about telecentre networks is how to generate sufficient income to implement concrete activities. Various approaches to financial sustainability are discussed in this chapter, both with respect to telcentre networks as a whole, and for the ways in which TCNs can support individual telecentres to achieve sustainability. It is understood here that effective sustainability involves many dimensions beyond solely financial sustainability, including social and institutional sustainability too.

Content and Services for Digital Inclusion (Chapter 6): Telecentres are in the frontline of digital inclusion as community centers that serve people with low incomes or who cannot adequately access information and ICT-based content and services in other ways. The chapter discusses how telecentre networks can play a key role in supporting telecentres to deliver those content and services.

Monitoring, Evaluation and Learning (Chapter 7): Monitoring and evaluation are important features of network governance: monitoring as a continuous process, and evaluation as time-bound intensive exercises are the main sources of institutional learning. This chapter deals with those aspects of monitoring and evaluation which telecentre network management can incorporate to know how the network is performing, and also where TCNs can strengthen the capacity of individual telecentres.

International Telecentre Network Collaboration (Chapter 8): One of the exciting new possibilities of advancing the goals and penetration of telecentres is via the collaboration of national or sub-national telecentre networks at the international level. The telecentre.org initiative is a living example, instrument and product of such collaboration. This chapter discusses tools and processes that can maximize such international collaboration via national or sub-national TCNs, with the end purpose of enabling and empowering individual telecentres.

The final two chapters focus on crosscutting telecentre network issues. **Chapter 9** focuses on **Integrated Network Management** and distils the main messages from the guidebook, aiming to pull the topics from the thematic chapters into a recognizable and cohesive picture. **Chapter 10** is about **Empowering Networks** and introduces elements of network theory and provide insights into the future of telecentres and telecentre networks, including possible lines of study and research.

There is an inevitable degree of overlap in the contents, since all these factors are interlinked and occur simultaneously in the daily operations of telecentre networks. How do you talk about participation without getting into communications issues? For the sake of clarity and brevity, efforts have been made to minimize such overlaps. We trust the reader will be understanding and patient with such occurrences.

A note about the future strategy of the guidebook: Once it has been translated into Spanish and French, it will be published in the web as a wikibook, to support its evolution into a living document as knowledge and experience about telecentre networks changes and evolves. This is based on IDRC's philosophy on open content sharing, where the telecentre community can take the lead in enriching and expanding its contents. As such, the guidebook will grow in quality and quantity from the contributions of members of the telecentre.org community and other practitioners. Moreover, additional topics may presumably be added in the near-mid future, on topics such as (i) training for telecentre staff/volunteers, (ii) knowledge management, (iii) creation partnerships, (iv) telecentre networks and ICT policies, etc.

Enough for the introduction; let's get into the real thing!

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1. ↑ C.K. Prahalad has become well known for his ideas about extending empowerment and consumption to poor individuals at the 'Bottom of the Pyramid', a term made popular in his book "The Fortune at the Bottom of the Pyramid: Eradicating Poverty through Profits" (2006, Wharton School Publishing).
2. ↑ In fact, more advanced definitions of digital divide refer to the inequity in access to the benefits and opportunities make possible through ICTs.

3. ↑ The first telecentres were often launched with the support of international cooperation agencies, in the context of ICT for Development programs.
4. ↑ See www.telecentre.org/notes/Network_support for more information.
5. ↑ The process of maturity may also include a period of decline, as observed in many networks. However, instead of leading to the 'death' of a network, this stage may often lead to transformation, critical re-shaping or inclusion into a larger network.
6. ↑ There are many ways to characterize nodes and connections, such as indicated in Anheir & Katz (2005, 2006).
7. ↑ This kind of exchange was done in Canada at the University of Cape Breton with one of the earlier telecentre programs in the province of Nova Scotia in the late 1990s.
8. ↑ www.itu.int/ITU-D/univ_access/telecentres
9. ↑ This is coherent with the strategy shown by its parent organization, IDRC, in supporting development networks of many types.
10. ↑ See earlier work from IDRC's Richard Fuchs ("If You Have a Lemon, Make Lemonade"), Mike Jensen in Africa ("Afriboxes, telecentres, cybercafes: ICT in Africa"), Chasquinet in Latin America ("Telecentros… ¿Para Qué?") or wide-ranging research done by Colle and Roman at Cornell University, as well as other new, notable publications such as "Making the Connection: Scaling Telecenters for Development" (Filip & Foote, 2008) by AED (Academy for Educational Development), supported by telecentre.org.

[edit] Chapter 2. Telecentre network governance – setting the playing field for a network culture

[edit] Telecentre network governance – setting the playing field for a network culture

Maria Teresa M. Camba (PhilCeCNet, Philippines)

Management challenges of telecentre networks often spring from the network formation; the decisions and actions the network leaders preferred to take. After years of network building and mentoring, we can point to a number of key aspects for successful telecentre networks. While most of these are decisions and approaches often undertaken during network formation, a telecentre network may, at any stage of its evolution, incorporate these perspectives in order to strengthen what it is already doing. This chapter examines key components of telecentre network governance such as instilling a clear vision, setting and tracking objectives, network structure, leadership, norms and accountability, resources (eg. financial resources).

[edit] Dimensions of Governance for a Telecentre Network

Governance refers to the common norms or rules that define the actors, procedures and accepted methods for collective action. Governance may be about the whole of society (which carries a more political connotation), whereas in other instances it may refer to specific areas such as internet – therefore called internet governance. 'Good governance' is understood to refer to an institutional system (and a collective culture) that stimulates the efficient and responsible behaviour of a set of actors.

Through governance, networks articulate reasons for existence, targets, how to manage resources, formulate and implement policies, and how to deliver services. Strong network governance depends of good relationships amongst members, skilled people, appropriate structures as well as clear rules and practices.

The impetus and momentum for the birth of a telecentre network can spring from a variety of situations — spontaneously and informally or from a more deliberate and intended initiative. Whatever the origin, the process begins with interaction between people during which the rationale for the network starts to take shape, coalesces and solidifies until the conscious decision to form it is collectively made.

The initial stimulus that sparked and sustained this interaction provides the first indispensable element for effective network management that must be addressed.

[edit] A clear shared vision

Telecentres generally have a common vision in coming together as a network — the growth, advancement, and sustainability of their facilities as well as increased capacities to serve the needs of their immediate communities. In other cases, a network may emerge on just one of the so many issues that telecentres face. For instance, a network could be founded on the need to increase availability of local content or reliable and affordable internet connectivity.

One of the primary challenges at the early stages of telecentre network management is to define and clarify a shared vision that the membership can identify with. A clear network vision is useful when a network starts the process of identifying services, resources and partners to work with. In some cases, the network vision may change as the needs and priorities of members change or because the original problem has been addressed. A dynamic network may then choose to recreate itself over another issue. The important thing is that telecentre networks need to hold their members together through a shared vision and purpose or their members will simply slide away.

It is highly recommended that a formal statement of network purpose is made and institutionalized. This will facilitate the network's accountability and communication with new members and partners. It will also help the network when exploring the potential for a formal structure later and the adoption of formal commitments and responsibilities towards the shared vision, in case it does not start as a formal institution.

[edit] Reinforcing the interaction

Networks require a critical level of sharing and interaction amongst members to ensure that the shared vision remains in focus for all and operational. Details of how to facilitate knowledge sharing within the network and engaging the membership are discussed in Chapters 3 (on Communication) and 4 (about Participation).

A telecentre network needs to have a communication platform through which members can interact. Most networks have discussion lists and forums for this purpose. Sharing accomplishments, issues and concerns, suggestions, and resources in a common helps a network to build and demonstrate its 'network value'. Members get to know one another in the process, and as a result are more likely to commit to helping one another with pressing issues in the future.

[edit] Setting and tracking the objectives

The objectives of a telecentre network spring from their shared vision. Different telecentre networks, though perhaps sharing many facets of their visions, will have specific objectives that may differ. Therefore if the the objectives are concrete, there are more chances to create locally relevant services.

Objectives may be classified as **organizational** in nature, which is, bringing telecentres under one sustaining and supportive federation to enable concerted efforts and unified representation, or strengthening the collaborative capacities of individual telecentres. They may be **content-oriented**, seeking to establish uniformity in certain operations, standards and services provided to member telecentres, or community approaches. Then there may be **resource-specific** objectives, seeking the growth of the network and sustainability of members through resource mobilization and sharing, supporting human resources throughout the network or generating a pool of network resources.

A network may have one of these types of objectives as priorities or a mix of them to describe the avenues for achieving its vision. Whatever a network chooses as the parameters for achieving its vision, these have to be arrived at collectively with maximum participation of all members to ensure a corresponding degree of acceptance by all.

It is ideal, but not mandatory, that individual telecentre objectives are aligned with network objectives. The participation of a telecentre in a telecentre network may be justified if even just a handful of the telecentre objectives display that alignment – as long as the other objectives do not enter into specific contradictions with what the network does or how it operates. For instance, a telecentre may wish to provide ICT training for its community (an objective) for which it will benefit as a member of the network. But if the business model of the telecentre does not allow it to share some materials (eg. because of intellectual property considerations), it may be difficult to join a telecentre network where all members can openly share their training contents.

The other way around is a little different: all telecentre network objectives must be based on individual telecentre objectives (as functions of their needs and opportunities). That is the basis on which to formulate the network's objectives. While TCN objectives cannot be expected to pertain to all telecentre objectives, they should be defined to maximize the value to the member

telecentres. In addition, part of the work of the network may be directed towards indirect objectives of some telecentres (such as when it involves policy actions that affect telecentres but do not feature among their most pressing needs).

What does this duality mean in practice? It implies that a telecentre network has to make sure it is tailored to the collective objectives of telecentres (bending over backwards if needed), while for the telecentres it is not mandatory to adapt to the network. However this does not mean that members may not need to consider certain changes in order to better participate in the network. In fact, some telecentres may well find it worthwhile to strengthen some of their capacities to better benefit from the network, whether instrumental (for example, installing and utilizing Moodle to gain from e-learning opportunities available via the telecentre network), or generative (eg. to create joint projects with other members through the network). We will discuss the latter in the last chapter, as part of advanced network management strategies.

Objectives serve as the directional signs for a network, and as we discuss in the final chapter, provide the true bearings in the network's typically unstable navigation. Though many objectives may be defined for the mid and long term, they are never permanent fixtures. When a destination is reached, objectives should be revisited and somtimes replaced by new ones. Part of the function of telecentre network managers, as we will see in the Monitoring and Evaluation chapter, is to track the attainment of objectives and be ready to change them or identify new ones at the appropriate time.

[edit] Shaping the network

The structure a telecentre network takes largely depends on a number of factors such as size of membership, and certainly by the objectives it seeks to achieve. A network that self-identifies itself as small in terms of membership, geographical scope, or the range and reach of its objectives may not need a formal structure, in contrast to diverse and complex networks. A smaller network may use a flexible, less formal network governance approach that allows it to achieve its objectives, enables the participation and involvement of its members, as well as provides for its growth and sustainability.

An important consideration in shaping the network is the promotion of equal representation allowing proportionate participation in network decisions and operations by all members. Whether this is achieved by shaping the structure components or by staffing the leadership and membership of these components is a decision to be made by network members.

Whatever the choice, a structure is functional and productive when it allows network membership parity in the share of authority and participation in network operations. It should thus allow leadership the means to effectively and decisively steer the organization towards its objectives while at the same time providing space for members to participate.

[edit] Leadership in a telecentre network

The issues of network management style and leadership are inevitably intertwined. While leadership inspires change, management promotes stability. Many networks start with a highly

consultative process where leadership changes frequently according to issues and resources required. As the network idea solidifies, leadership may shift less often and rest within the most active and most resourced members.

An example would be the need for a dedicated facility and staff to take on the duties of a network secretariat or hub where concerns and support services for the network are addressed at the outset. This was the case in the Philippines with the NCC-CICT (National Computer Center of the Commission on ICT) that had the reach and the resources for the Philippine Community eCenter Network (PhilCeCNet) to get itself on the launching pad, as presented in this chapter's case study. The organizational member who contributes the most to creating and operating such a facility usually finds itself in the leadership role at that point in time, a phase usually characterized as the transition phase before the network formally defines its structure, policies, and operations. A consensus for leadership is essential at this sensitive point. Such a consensus may be easy to arrive at when members recognize the need, and willingly allow leadership to be determined by means and capability. But in cases where similar means and capability may exist together with a certain rivalry among some members, the general interest of the network must come to the fore. In such a case, the strategy of leadership rotation by tenure may be adopted, and may be maintained as a leadership policy even in the general management of the network. When the network matures, the management style and leadership must be rooted in the original climate that gave birth to the network – participatory and multi-sectoral. Aided by equal representation and leadership rotation, it enables the network to remain true to its essence.

Network management, especially the day-to-day aspect of administration and support, requires that an extent of decision-making be centralized in the interest of speed, effective response, and manageability. It would be impractical to expect that every decision the network has to make is to be derived from general deliberation.

An effective and practical organizational structure helps this process, where a leadership component such as a representative executive council may be effective in handling decisions of a level and priority that need not be submitted to the general membership for approval.

Of course, one of the main points of decision-making refers to what kind of decisions are made, and where. A highly decentralized network that has agreed on a minimum set of rules but which uses consultation among the telecentres will in effect have a highly decentralized decision-making scheme. We will reflect on what this entails further ahead in the concluding chapter, when comparing 'aggregating' and 'enabling' network styles.

Some quick additional points to consider on network leadership:

1. The network leader must see its role as facilitatory to be able to work their ideas into the network, searching for kindred spirits who want to share their pursuit.
2. Networks do not require personal relationships between all members but a central issue is the coordination of the network leader. The leader or the leading organization must have good 'chemistry' with the members.
3. It is common to have a formal agreement on the conditions of the relationship.

4. Network leadership, as compared to traditional organizational leadership, tends to be more value-based than control-based. Trust becomes the central tenet to take advantage of the flexibility and agility afforded by networks.

There are several other factors that influence network management. Culture is one such factor. Some cultures are more collaborative-oriented while others may lay claim to fierce individualism. It is important to understand such external influences and appreciate how to align them harmoniously for the benefit of the network.

[edit] Norms and accountability

The mentioned strategy of leadership rotation as well as the desired balance between centralized and general decision making are examples of certain norms and defined processes a network must arrive at to achieve effective network management.

Norms cover a broad range of organizational concerns that may include:

- Membership eligibility, types, and responsibilities
- Codes of conduct
- Delineated roles and functions of network components, officers, staff, etc.
- Internal network coordination
- Monitoring and evaluation methodologies and related tasks
- Selection of officers,tenures and rules of succession
- Decision-making procedures
- Disciplinary/conflict resolution procedures
- Merit recognition
- External relations

There may be other areas where norms and processes may be developed for an effective governance system.

It is vital that norms and processes be developed after consultation with members. The diverse membership of a telecentre network requires that certain social, cultural, religious, and political sensitivities be considered carefully in the crafting of norms and procedures so as to avoid the obvious pitfalls. What may be acceptable or tolerable to one group may be offensive and insulting to another.

While the developing rules and procedures require consultation, the formalization of these rules may be the task of a special group formed for the purpose. Call it a charter, rules and guidelines, or a code of conduct: an explicit statement of these norms and processes may prove invaluable to a network's effective management.

[edit] Financial and other enabling resources

A telecentre network can determine its structure, formulate its objectives, craft a common vision and even enjoy an outstanding leadership. But it can dissipate fairly quickly if the appropriate enabling factors are not set in place. Key amongst these factors are financial resources, support human resources, technology, facilities and access to expert knowledge in areas of network concern.

The chapter on Financial Sustainability treats in some detail the challenges of ensuring necessary monetary resources and some of the means to get them. In this section we simply highlight some aspects of governance that are intimately related to financial resources.

The network start-up effort where members with the means and the most to contribute assumed temporary leadership to get things off the ground is often a curtain-raiser to the realization that once the network gets underway, that interim arrangement will cease. Telecentre network managers then have to identify resources from external sources and/or from their own members, weighting the realistic possibilities that each option presents.

The second (internal) option is directly within the control of the network and can be activated from the start. It will entail some rules regarding member financial contributions resulting in formal commitments binding on all concerned. But the first option of external resource generation will probably demand much more attention from a telecentre network manager.

Often, the chronic scarcity of resources steers a network to prioritize a culture of collective volunteerism in network management. The network is not a revenue-generating business enterprise that can support a salaried management team. But it needs to find a common basket of support sources, as the Financial Sustainability chapter discusses.

As a telecentre network matures, it often moves towards more stable management schemes: professionalized, salaried and specialized. Business models will include a combination of sourcing. Institutional agreements may be reached with government entities, such as in government-led national telecentre or information society programs, covering management and operational costs of the network. Funding special projects from external sources may enable the recruitment of certain specialists or support staff to ensure success of the projects. Members may pay membership fees and a subsidy for some of the services provided by the telecentre network (eg. technical service). Telecentre networks may offer services to outside organizations (evaluations, research, and so on) that could also help it to mobilize resources.

Finally, it should be pointed out that for many telecentre networks, especially those whose members are either struggling to generate a positive revenue stream from services to sustain operations or whose operations seem to have stalled due to resource scarcity, membership in the

network may carry the hope that additional opportunities will arise to find new answers to their needs.

[edit] Why do some networks fail?

In this guidebook we are examining a plethora of factors related to managing telecentre networks that can help a network succeed. Some of them are in the realm of TCN managers – those 'popular' individuals are fully dedicated to the success of their networks. Many are applicable to the member telecentres.

But learning often comes from failures, and it would be wise, or simply realistic, to acknowledge that much of what is covered in the guidebook comes from the arduous road travelled by the telecentre movement worldwide and which caused many telecentres to close over the last two decades. This, together with issues inherent to networked modes of organization, can help us reflect on some of the main causes of telecentre network failure.

The following points are simply stated to make us think and to further the debate among telecentre networks:

Fading vision — When members of a network get over the first euphoric phase of networking and see that nothing much has changed and nothing new has taken place, the spirit of a network wanes and the exit of involvement and participation spells the end of a network.

Unequal interaction and benefits — some members get more out of the network than others. Some have difficulty sharing and interacting. Language problems, technology problems, resource problems, cultural and social barriers, or a combination of these may lead a number of members to conclude that the network may be suited only for a select few. Some members who are unable to establish an identity or find their place in the network may wander away and thereby weaken the network.

Poor leadership — when leadership fails to build trust and commitment, when it cannot be perceived as ethical and results-oriented, or when it fails to sustain the created culture of cooperation and sharing that is born with a network, the network withers.

Excessive control — if those tasked with coordinating or managing the network end up taking and imposing too many decisions, or if the power in the network is perceived to be too centralized or concentrated on a handful of nodes, the network will suffer in terms of shared commitment – and some members may quietly sit on the sidelines or simply step out.

Cliques and rivalry — another failure of network leadership involves the existence of dysfunctional cliques that undermine the essential spirit of the network. It worsens when leadership itself is perceived to belong to a clique. Rivalries that are allowed to flourish can sap the unity and cooperation within the organization. The sense of 'betrayal' that sets in is toxic for the network.

Resource famine —when a network is perceived by members as being unable to meet even the most basic of its functions due to inadequate resources it might be a good time to leave the sinking ship. If network leadership fails to show positive results for resource generation, and even the most basic network maintenance tasks falter, the network also fades away.

Network fatigue — It may occur when a members feel overwhelmed by the demands of the network (and this is a rather relative perception based on one's own capacities) or from involvement in one network too many. When network fatigue sets in, members become silent spectators – without giving much of a clue about their relative withdrawal or inactivity. .

Inadequate monitoring — Sometimes an organization is run with little concrete information on what it is actually doing, or about how is it operating. In the case of a network, with its predominantly horizontal relationships, the absence of 'traditional' control by authority mechanisms make it even more important to base decisions on information and feedback. Telecentre network management should have a clear picture of what the needs of the members are (and some vision as well about the opportunities).

[edit] Case Study: The Philippine Community eCenter Network, Inc.www.philcecnet.ph

Sometimes, there's no stopping something once the ball is rolling. When the National Computer Center of the Commission on Information and Communications Technology of the Philippines initiated a series of Knowledge Exchange Conferences (KEC), bringing together all key players, operators, and managers of 755 telecentres in the Philippines in 2005, the momentum started for what would become the Philippine Community eCenter Network or PhilCeCNet. The network idea didn't come immediately. But it arrived soon afterwards – before 2006 had even ended.

As PhilCeCNet began to take shape, it did so systematically. It drew up a charter for the network and positioned itself as an implementing partner for the Philippine CeC Program and its mandate for responsive, efficient, valuable, and sustainable Community eCenters, a role highlighted in the CeC Roadmap for 2008-2010. It also helped establish the telecentre.org Philippine Community eCenter Academy (tPCA) as the network's capacity building arm.

With members from eight different telecentre initiatives in the Philippines, PhilCeCNet's general assembly, the highest policy body, was organized into nine sector clusters: National Government Agencies, Academia, NGOs, the Private Sector, Media, CeC Managers, CeC Users, Funding Agencies, and Local Government Units. Each of the sectors nominated three representatives to the Executive Council to represent each of the country's island groups – Luzon, Visayas and Mindanao. The members at large then elected from among the nominees a sector representative to an Executive Council, which led by a Chairperson, implements the network's initiatives.

Four committees corresponding to the four thrusts (or lines of work) of the national CEC program currently prepare work and implementation plans that are evaluated and approved by the Council. These Committees also draft revisions to any strategies formulated by the Executive Council and recommend options. Special committees on resource mobilization and membership development are also in place.

PhilCeCNet's administrative operations are handled by a National Secretariat. This Secretariat is led by an Executive Secretary who oversees day-to-day operations and carries out Council mandates. All CeC member concerns and affairs pass through this clearinghouse and are routed to the appropriate respondents for their information and action.

Secretariat staff keeps a close eye on PhilCeCNet's network hub website (www.philcecnet.ph) which is a beehive of sharing about CeCs: what they're doing, what's happening to them, and what's coming up. People asking questions, others posting answers, information exchanges, and communication to network management mainly take place here. The website is a dynamic news board for all that concerns CeCs and was recently a semi-finalist for the Philippine Web Awards. This is the hub that actualizes the interaction-sharing aspect of the network vision.

PhilCeCNet made its debut on April 3, 2008 — and it is expected to play a vital role in realizing the Philippines' national vision of "A Community eCenter in Every Municipality" by 2010.

[edit] Quick tips about Network Governance

Network governance presents many challenges, especially when we consider that network organizations such as telecentre networks are not the same as traditional organizations in terms of structure, scope, culture or stability.

In light of what we have stated, the following tips emerge as brief reminders for telecentre network managers of priorities to keep in the back of their minds - and at the forefront of their actions!

- **Nourish the vision** — the lifeblood and spirit of the network must always be visible, vibrant, and given life through progress-based results.

- **Strengthen the interaction** — A sustained effort to build a culture of sharing and cooperation within a network shows that the network is true to its intentions and binds members to the roots of the organization. Dynamic interaction also sustains one of the basic pillars of the telecentre network: the exchange of knowledge, skills and experience.
- **Meet member needs with network objectives** — When members see their own objectives reflected in the network's objectives and when the advances in the network's attainment of its objectives contribute to their own achievements, the commitment level is increased or remains high.
- **Organize well** — Take time and focus closely on organizing the network well, tuning its structure to network objectives and member needs. This will make it easier to manage the network.
- **Transparent and responsive communications** — Good network management requires good communications between management and members. Being informed clearly and in a timely manner provides a strong sense of inclusiveness, even if the information communicated is bad news!
- **Let leadership be true to participative management** —While network leadership assumes a special operational and administrative role, its philosophy must remain true to

the original democratic and volunteer spirit of sharing and interaction that gave birth to the network.

- **Put the essential systems in place** — Policies, norms and processes, functions and responsibilities are vital to network management. They set standards, promote order, and prescribe the elements and codes of organizational culture.
- **Be sensitive to member values** — Consideration of member values in implementing network management shows that the network cares about its members and generates invaluable premiums of mutual respect and appreciation. A network that shows its sensitivity reflects sincerity, engenders trust and builds commitment.
- **Reach out to partners** — In sustaining the network through resources, thinking out of the box and discovering opportunities beyond network boundaries shows a network's innovative spirit and resourcefulness. There is never a lack of possible partners with whom to travel the road. If the road leads the same way that the network is going, a fellow traveller can be welcome company, especially if both have something the other may find useful.

[edit] Chapter 3. Participatory Telecentre Networks – A Collective Enterprise

[edit] Participatory Telecentre Networks – A Collective Enterprise

Olga P. Paz Martínez (COLNODO, Colombia)

Networks are sources of social and organizational support where interactions, exchanges and relations between different actors take place. Partnership networks enable the realization of individual goals which otherwise could not be reached as an individual person or organization. This is precisely why we integrate telecentres into networks.

Establishing interactive networks is not an easy task, due to the many factors that come into play. We have to structure a network, set goals and long-term plans as equitably as possible, which is always a challenge because it involves fulfilling the demands and requests from various members.

When several members decide to join a network, it is because they find value in the benefits, but at the same time they assume shared responsibility and take charge in making it stronger. We have to understand that participation is not an engine that generates profits for its network nodes/members; rather, the participatory dynamic is itself the main potential benefit, where the social capital for these organizations increases as a result.

This is why the management of a telecentre network should include an outline or plan of participation to promote collaboration among each telecentre member through flexibility,

freedom and incentives. Bear in mind that a high level of participation will significantly promote sustainability of the network.

We hope that this chapter will help you to discover ways of increasing the levels of participation within your telecentre network. First, we discuss the motivation of members to participate in a telecentre network and how to get these members involved or committed once they are in. We will talk about some aspects of network governance directly related to promote participation (linked with the previous chapter about telecentre network governance). Next, we will explore the issue of a distributed leadership and the principles of a collaborative culture, after which we will identify different factors and methodological tools that can help to make participation more effective. Finally, we will discuss a key issue for telecentre networks that directly depends on their collaborative culture: knowledge management.

[edit] Participation as an Engine of Telecentre Networks

[edit] Commitment and motivation to create a telecentre network

Participation is at the core of telecentre networks. Almost by definition, a network results from the following participation exercise: several individuals and organizations come together and decide on the principles, objectives and structure of the network. But before creating a network, they identify several common motivations; some in their own interest, and others for the benefit of everyone, such as:

- To build and strengthen political positions for specific actors or situations;
- To create initiatives and joint projects between several telecentres based on a common goal and for the benefit of members;
- To share content, courses, knowledge, etc;
- To face situations and risks that would be significantly more difficult to handle individually.

These fundamentals of participation and collaboration may be obvious enough for founding members, or at least implicitly felt. But as new nodes or members join the network, the participation base can become diffused or unclear. Therefore, it is very important to communicate to new members the importance of the participation and collaboration principles so that they can fully share the principles, objectives, policies and ways of acting inside the network. It will also help to document the participation and collaboration activities, in order to maintain these goals.

[edit] Involving members in the network

When you start the process of setting up a network, one of the first issues is the process of membership. It is important to have a formal procedure that involves the communication of a request from the member interested in being part of the network. This document has to indicate that the member agrees and fully shares the principles of the network, including in the participatory and collaborative aspects.

Although it is generally assumed that if new members choose to join a network it is because they agree with the principles, some may want to join only because they want the prestige of belonging to the network (especially if it is widely recognized), so they may not have a full understanding of the participation and collaborative aspects.

In this sense, it is worth running an introduction or training session for new telecentres members. This can be done as a talk, a meeting, a workshop or an interactive online workshop where the member telecentre can have the opportunity to ask questions and propose activities to be developed. Also, it would be good to consider doing the introduction or training before formally accepting new members in the telecentre network, so that introduction is part of the procedure of joining the network.

If the new telecentres can understand and share in the principles, values and goals of the network, it is easier to generate good ideas, proactive attitudes and new lines of collaborative work. On the other hand, if new members do not share in the ideas, values, principals and goals of the network, it will be harder to reach agreement and take constructive actions that ensure compliance with the network's goals. We may actually jeopardize the stability of a network if new members cause a disturbance or are difficult to negotiate with.

[edit] Participation and governance

As the network grows, one of the most important issues that helps to ensure the future of the network is in the way that it is managed. The nature of a network as an organizational structure implies that a network is not meant to be lead, it is meant to be coordinated.

The governance of a telecentre network (as mentioned in the previous chapter) is largely characterized by coordination. Whether as individual or a collective coordination, this implies – almost by definition – that members of the network will work together for the benefit of the network as a whole group.

Therefore, active participation is one of the main indicators of good governance of the telecentre network. The management team of the network must pay special attention to issues related to coordination and governance, such as:

- To undertake the action plan of the network during a specific time period that is defined by members, in order to facilitate their commitment and interest in planning;
- To manage and share with new members the network values and principles so they all know how to participate in the network, as previously noted.
- To design, develop and implement training on how to participate and collaborate on networking activities.
- To collectively determine monitoring and evaluation methodologies for the network.
- To include the telecentre in taking on monitoring tasks, maintaining an open and participatory point of view.
- To encourage member telecentres to promote their visibility through external communications, on topics such as news, projects, event announcements, calls for publications and so on, so that people outside the network stay informed.

In practice, people involved with telecentre networks know that coordination involves a delicate balance between centralization and decentralization. But to maintain coordination does not necessarily imply that decision-making processes are centralized, or that the actions are carried out without the support of members. Put simply, it is important to ensure there is a person or team in place that takes responsibility for general network tasks. If there is a lack of coordination, there is a risk that the responsibility becomes dispersed and therefore that no one takes care of tasks.

To coordinate without centralization means maintaining a healthy balance between taking action and delegating responsibilities, while including the members of the network. This is not an easy balance to achieve, and needs to be negotiated between several aspects:

- The coordination involves making decisions and the delegation of duties that must be synchronized with the network principles and objectives. There should be a margin of discretion for those making decisions.
- Members often (wrongly) believe that if there is a person or group in charge of coordination, that that specific person or group has to take care of all networks tasks.
- Being proactive and collectively making decisions as a team implies a high investment of time and resources, and members are not always available to meet such requirements.
- The leadership style of the coordinating team should be one that is inclusive, participatory and well oriented. This coordination must be carried out by a network leader who is open to constructive dialogue.

[edit] Participatory Leadership

To ensure that members feel like part of a telecentre network, it is important to avoid any hierarchical planning which works against the horizontal nature of a network, since that is one of the most positive attributes of a network. A network consists of nodes that normally interact with one other with a margin of freedom and autonomy. In this sense, the network is a space where ideas are freely exchanged, relationships are maintained and information and knowledge circulates between the telecentres (and other non-telecentre members who may also be part of the network).

We want to promote collaborative activities and operationalize the desired horizontality of our telecentre networks. But to 'impose' or ‘demand’ participation is not an effective way to encourage collaboration; rather, networks should work towards creating a collaborative culture, which can be done by supporting a participatory style of leadership, rather than one that is ‘top-down’.

Participatory (or distributed) leadership implies 'harmonious leadership', based on common values. It may not be the kind of leadership style that most of us are used to, but there are ways to promote it within telecentre networks. Participatory leadership does not imply sharing leadership responsibilities between network members, nor does it mean that members each have a particular level of leadership to live up to. What is actually implies is described by the following:

- Various actors in a network can exhibit leadership in parallel, which corresponds to their shared interests and objectives;
- Taking care that leadership does not become 'obligatory' or 'decreed' for any person or entity; and that
- Actively building leadership skills among members of the network is critical.

For starters, it is advantageous that telecentre networks are open systems that are continually bringing on new members, while existing members always have the option of leaving the network. Individual roles can change (where formal management tasks may shift from one telecentre to another), as well as leaders, who may change or move around between telecentres.

In the majority of telecentre networks, there exists some kind of entity that governs the network, such as a Coordinating Committee, or an Executive Secretariat, and so on. This entity depends on the effective functioning of the network, and actually makes the coordination easier, especially when the focus is on facilitation (i.e. actions) rather than on concentration (i.e. power).

On the other hand, participatory leadership is useful when the network wants to bring forth a particular action (since the network does not always represent one single actor), or when negotiating actions that encourage the active participation of various members (where certain leadership responsibilities can even be delegated).

In any case, we should avoid comparing leadership and management styles, and neither should it be assumed that people or entities with more leadership skills will automatically take on management or administration duties. Leadership and management styles will vary depending on the characteristics of the telecentre network.

Participatory leadership can also help to resolve conflicts and provide solutions in difficult situations. A network of telecentres can have a remarkably heterogeneous composition, with nodes and members that coexist rather than compete, whereas with others there may be competition and power struggles. A highly centralized leadership can sometimes effectively resolve differences between members. That said, for the sustainable and healthy growth of a telecentre network, it is important that the governance of network take on a participatory leadership style, where many problems can be solved collegially.

[edit] Collaborative culture

To establish a collaborative culture is one of the most difficult – but also critical – points in creating a productive telecentre network. It is difficult (and quite likely impossible) to develop participatory leadership within an environment that does not embrace a culture of collaboration. That is, this type of leadership can help to promote collaboration, but it is virtually impossible to be the sole cause behind the creation of a collaborative culture. On the one hand, it can help to delegate work and distribute activities among members. On the other hand, the first step towards creating the initiative for collaborative working must come directly from members themselves.

The value of a network greatly increases when there is a real culture of collaboration among member telecentres. The more spontaneous the collaborative activities (as a result of the tools,

methods and even the possibility of access to funding), the easier it will be to launch joint projects whose results can actually feed into each other and increase mutual trust. This may be an area where a collaborative culture of networks can play a bigger role: in the end, organizations with a highly rigid structure can also work in a decentralized manner (like an army, for example). Networks can create an ecosystem of collaborative working characterized by the freedom, merit and shared visions that often lead to very interesting results – in the area open source software, for example.

A network of telecentres that enjoys a healthy collaborative culture will be a productive one, and most likely sustainable as well. But like distributed leadership, a collaborative culture also requires types of participation that do not negatively impact the efficiency or results of the network.

[edit] Effective participation

It is not possible (nor recommendable) to achieve 100% participation while including all network nodes and members in the decision making process of a network, and even less with respect to specific network-related projects and activities. Participation for the sake of participation alone can risk becoming an aimless process, like a book without words. What we need is a well-designed model of participation, one that is results-oriented, designed to achieve the desired outcomes. For example, the level of participation necessary for the strategic planning of a network of telecentres is not the same as would be needed for the redesign of the network website.

A well-functioning network is not one that maximizes participation quantitatively (measuring the number of participants), but rather one that qualitatively maximizes the products/results achieved in a participatory manner. A network usually distributes its work along particular lines of action, while some members tend to be more committed to the development strategies than others because it is within their particular interest to do so. For example, some telecentres are more able to participate than others in activities such as research, or in the generation of content rather than in the provision of services.

It is therefore important to strengthen and stimulate people's networking ability, with the so-called 'generative capacity' to which we referred in the previous chapter and which we will also describe in the last chapter. An important function of a TCN is the capacity for building leadership, planning, collaboration, and negotiation skills from a network point of view. In other words, to be able to perform all those network functions within a network environment (for the purposes of our own network and more broadly for the 'network society').

In addition to training, another way to generate those capabilities is simply through practice, such as by managing a project or organization that requires coordination and working in a network. Coordinating a network involves a lot of difficult negotiation, like the daily work of a spider that weaves its web and tries to keep it from breaking.

It is critical for the people who take on coordination of the network to promote effective participation, in a way that does not wear out the participants and which generates results

effectively and efficiently. One way to achieve this is through the continual identification of opportunities for collaboration through projects, activities, campaigns, and so on.

Additionally, network coordinators tend to be very familiar with each of the network members, and can therefore steer the most appropriate opportunities towards the individual nodes (telecentres) best suited for the work.

[edit] Knowledge Management

Knowledge is one of the main assets of a telecentre network. It can be either tacit or explicit, but in any case it is conditional to the uses and social and cultural history background of each person, organization or community. Tacit knowledge is based on individual experience, skills, abilities, values, judgments, beliefs, viewpoints and mental maps of each person, and therefore is not easy to share with others, at least not in a systematic way.

Explicit knowledge is that which can be expressed in words, a song, numbers, charts, formulas, and so on. It is a kind of knowledge we can find in different learning tools such as videos, books, articles, websites, and we can access in different places such as libraries, hard disk drives, databases, museums or newspapers. The application and use of this type of knowledge is one of the biggest attractions to becoming part of a network. To make the most use of it, it is recommendable to have a knowledge management strategy plan, especially one that can be documented.

Knowledge management (KM) refers to different processes that seek to transform, generate and transfer knowledge. One of KM's main challenges is to capture tacit knowledge in order to share it with other people, sometimes becoming explicit knowledge in the process. A good strategy takes both tacit and explicit knowledge into account, each involving the most appropriate tools and mechanisms. In this way, the strategy will draw on the most appropriate people, organizations (i.e. telecentres in this case) or telecentre network to involve.

The concept of knowledge management goes beyond knowledge transfer alone, and therefore the concept of 'participation' is also addressed in this chapter. Participation is the core principle for network growth. It's more like a kind of 'know-how', a social discursive knowledge that shifts through media and products of knowledge. The knowledge within each node can be expressed in many different ways in the telecentre network, such as through workshops, meetings, books, websites, videos, etc.

A good knowledge management strategy is that it is 'open' rather than imposed, and it should be based on the respect for the knowledge of others. Knowledge can be shared in the form of lessons learned, experiences, or best practices and it should always be used to contribute to, and complement, existing knowledge and practices in telecentres – not to replace them.

Knowledge management should consider both live and virtual presence, by taking advantage of ICTs to facilitate collaboration and participation, including:

- Virtual communities (such as ning used by telecentre.org, or Dgroups);

- Social networks (including Facebook, Sonico, Tuenti, etc.);
- Places to share content (flickr, YouTube, Slideshare, GoogleMaps, etc.);
- Collaborative editing documents, such as a wiki or googledoc; or
- Virtual training courses.

A knowledge management workplan can specify the tools and communication media to use to share information, as well as frequency of use, structure, design, content production, editorial policies or a style manual.

But the ease of access to these tools should not cause a sea of information and content that can overwhelm members. Just like effective participation, knowledge management must incorporate effective methods for the input/output of specific knowledge available to members: when and where they need it. However, this is without a doubt much easier to say than do; in many jobs, information overload impacts productivity and stress levels.

In order to avoid such problems, and to effectively take on knowledge management within a community or group, it is useful to identify one or more facilitators who can facilitate knowledge flows. Knowledge management is more an art than science, and it benefits from people in the community who know how to motivate others and who can find the correct channels to spread useful information to the right people. Very few knowledge networks can claim success without the constant and dedicated work of these 'infomediaries'.

It is possible for knowledge to be efficiently managed without using participatory processes; this is something that happens every day in centralized organizations. In networks, however, participation is essential to ensure knowledge flows that do not depend on instructions from above, but rather on collaborative participation where each member adds value to the network.

In summary, the value of a network is a function of the possibility of creating shared knowledge through the experience base of each of the actors.

[edit] Case Study – The National Telecentre Network in Colombia

The National Telecentre Network in Colombia has been informally functioning as a network since mid-2001, with participation from the civil society, business and government sectors.

The aim of the network is to "create an efficient and sustainable model of collaboration between members, with the aim of creating a positive impact on the development dynamics in the communities"[1]. In other words, the network focuses specifically on participatory and collaborative processes.

The strategic objectives of the network are:

- To strengthen ICT community access centres;
- To promote information and knowledge exchange (experiences, lessons learned, ideas, resources, teaching materials, methodologies, tools, etc.) between network members and other communication networks, public media and social movements;

- To promote the consolidation of the national telecentre.org Academy;
- To promote the development of virtual communities, including both thematic and regional;
- To encourage the participation of network members in various fora for discussion and learning about ICT and Development, at both the national and international levels.
- To promote the development of regional networks of telecentres (at state, municipal, and local levels).

The network brings together the people and organizations who coordinate, research, lead, train and assist in national telecentre processes. It aims to open spaces for dialogue between telecentre initiatives that are led by various players, helping to connect telecentres put in place by the national government (through the Compartel program), and those by local governments, private companies, universities, NGOs, research centers, or community organizations.

Currently, the network is coordinated by a Coordinating Committee, which is composed of the following organizations:

- Colnodo (www.colnodo.apc.org)
- Makaia Corporation (www.makaia.org)
- Universidad Autónoma de Occidente, UAO (www.uao.edu.co)
- University of Cauca (www.unicauca.edu.co)
- Ministry of Communications of Colombia (www.mincomunicaciones.gov.co) and the Compartel Program (www.compartel.gov.co); and
- Digital Corporation of Colombia (www.colombiadigital.net)

Telecentres in Colombia vary according to their financial structure, how they are installed, overall operation and location. However, they all share in their aim to achieve social and financial sustainability and the meeting of local needs in order to positively impact on the community, to achieve development goals.

The network has run **National Telecentre Meetings**, which have been financed, coordinated and convened by civil society organizations with help and support of national and local governments.

Up until now they have held five meetings. The objectives of the meetings have varied between exchanging experiences to building collaborative strategies and consolidating the network. Although the first meetings were intended to bring everyone together, share experiences and identify lessons learned, and common needs and challenges, they have evolved into active learning spaces through live workshops, discussion forums about public access to ICTs, and debate about a common agenda to strengthen the network.

The main impact of the network is reflected in these meetings and on the fact that they have gathered hundreds of telecentre managers together from different areas of the country. The meetings maintain their purpose as regular spaces for discussion and sharing experiences, learning, training telecentre leaders and creating partnerships.

The conference has grown from 30 participants in the first meeting to over 80 in the second and third, reaching 110 participants in the fourth and 200 in the fifth and latest meeting. The meetings were intentionally focused on being participatory spaces for exchange and discussion rather than academic spaces, particularly to promote the participation of those directly involved in the day-to-day running of telecentres. In the fourth meeting it was possible for the first time to include the participation of Compartel telecentres managers, a new government initiative that has put in place about 1,700 telecentres throughout the country.

Each meeting saw an increase in regional participation. Colombia is divided into 32 districts, and by the fifth meeting they managed to include telecentre leaders and managers from 20 districts, which represents a significant portion of the whole country.

Other important areas of the Colombian national network's emphasis on participation are:

Knowledge Management: To facilitate access and improve communication within the network, the following activities are encouraged:

- The creation of virtual communities for knowledge sharing and dialogue;
- The exchange of teaching materials, methodologies and tools on various issues that may impact the telecentre development;
- The participation of network members in various scenarios of discussion and learning about ICTs and development;
- The reflection and discussion of new proposals for community communication, new technologies for virtual interactive meetings, at the regional and national levels.

Information and Communication: The goal is to build a communication strategy that strengthens network information channels by promoting interaction and dialogue among members. The main network spaces for information and virtual communication on the internet are:

- The national telecentre portal: www.telecentros.org.co
- The network distribution list: colombia@tele-centros.org
- The telecentre network virtual community: comunidad.telecentros.org.co

Education & Training: The network strengthens the skills and abilities of people who manage telecentres through a process of in-class and virtual training. The first virtual training project is the national **telecentre.org Academy**. For in-class training, local and national telecentre meetings are held.

Each of these lines of work is undertaken in a collaborative way. While the leadership for each of these processes lies in the hands of a member organization (according to its individual mission), attempts are made to include members from different parts of country in their implementation.

In order to undertake more network-related activities, more information about the network was gathered, including the total number of telecentres in Colombia, their associated characteristics, and where they are located. Further, it is hoped that in the future:

- Hundreds of telecentre managers and leaders will formally confirm their participation in the network;
- The telecentres will be mapped geographically (available online);
- Effective channels of information and communication between members to publish information through the virtual community;
- An online library of materials and resources will be created;
- There will be a continued production of free tools that all telecentres in Colombia can use, in order to improve their skills and performance;
- A user registration system will be created.

Through the participation of our members we have achieved the following things as a network:

- The consolidation of the national telecentre.org Academy, where more than 350 telecentre managers and leaders have been certified via virtual training courses.
- The organization of five national and regional telecentre meetings, which have been attended by more than 400 people in total who are all associated with the telecentre movement in Colombia (particularly telecentre managers and leaders);
- The creation of information and communication media for the network, such as the portal that includes the experiences, materials, resources and virtual community for more than 40 telecentres with more than 350 people registered.
- The mapping of 864 telecentres, of which 131 are online and the rest are near to completion.
- Influence on ICT policy in Colombia. One example refers to the implementation model for 1669 new Compartel telecentres operating from within educational institutions and which will use a methodology for social telecentre appropriation designed, tested and published by the network;
- The recognition of the network as a leader in telecentre issues in Colombia. In fact, when completed, the new Compartel telecentres will be joining the national network.

One of the most important lessons learned is that the network will not function without an organizing agency to guide it and lead activities in collaboration with other members. Despite the initial successes, particularly with respect to the national meetings, it through the managing committee that many beneficial activities were brought about for telecentres in Colombia, also incorporating decision-makers at the local and national levels.

However, it is nevertheless a challenge for the managing committee to become much more involved in telecentre work, not just as beneficiaries but also as executives. For collaboration between members to really be strengthened, communication channels need to be relied upon, including virtually, as well as through face-to-face exchanges such as workshops, meetings and forums.

[edit] Quick tips about participation in telecentre networks

- A collaborative spirit and constant support from those members who wish for a network of telecentres should be pursued deliberately – it does not usually happen by itself.

- Most decisions in networks must be come about through consensus, in order to enhance the process of negotiation and compromise.
- Trust among members and transparency of actions are some of the core requirements for participation to take place.
- Training on networking activities helps to improve teamwork and productivity and therefore encourages participation.
- Collaborative cultures are not achieved in the short term, but must be gradually advanced and taken into consideration in the medium-term.
- One should always ask 'what can I do for the network?' over 'what can the network do for me?'
- Proactive collaboration between network members contributes significantly to the sustainability of the network.
- It is essential to prevent competition between members, nodes, projects, or events in the network. The role of the network is to encourage complementarity, not competition.
- It is necessary to strengthen channels of communication and information and to have a fluid flow of ongoing communication with members.

[edit] References and Resources

[edit] Note

1. ↑ From the National Network of Telecentres Action Plan document 2009

[edit] Chapter 4. Communication Strategies and Practices for a Telecentre Network

[edit] Communication Strategies and Practices for a Telecentre Network

Paula Carrión (InfoDesarrollo, Ecuador) [1]

Effective communication is critical to the success of telecentre networks. Without it, people who are not directly involved with network activities will never know about what's going on, the impact activities that are having, or the value of the network itself. Communication also contributes to network growth, that is, to expand its constituency, nurture existing relationships, attract new partners and open up opportunities for new resources needed to support telecentres.

For the most part, network communications aim to achieve three things:

- **Relationship building** – generating participation instead of audiences by building bridges to people and organizations, and then nurturing and deepening such relationships on a regular basis.

- **Publicrelations and awareness**– raising or managing a positive profile of the network, its members, and important issues such as affordable connectivity for telecentres.
- **Marketing and influence** – promoting specific products, services and influencing behaviour change (attracting NGOs to use telecentres in their communities, for example).

In this chapter, we discuss how to create and put in place a communication strategy that can be useful for a telecentre network. It is important to distinguish between 'internal communications' (among telecentres within the network) and 'external communications' (for stakeholders and other audiences outside the network). We will also touch on the role of TCNs in strengthening communications capacities of individual telecentre members.

[edit] Creating a network communications strategy

In its simplest expression, we may consider that a telecentre network's communication strategy has two broad dimensions: internal and external.The internal communication strategy serves to facilitate relationship building, nurturing trust, participation and conflict management within the 'nodes' or network constituency. Good internal communication practices enable creation and sharing of relevant information and knowledge products as well as useful relationships. Internal network communications may also include supporting the communication needs of individual member telecentres as they reach out to respective communities. This internal aspect of communications constitutes the 'nervous system' of telecentre networks.

The external communications dimension deals with people and organizations outside the telecentre network. These include government, civil society, professional groups (such as educators), the private sector, and the general public. Adequate external communications create awareness about telecentre issues (including problems and possible solutions) and the impact of telecentres for national development. This awareness creates confidence among target groups in their work and relations with telecentre networks, which in turn is a key element in building and nurturing partnerships.

Successful network communications will benefit from a well thought-out strategy that has clear goals, objectives, target groups and expected outcomes that can be tracked over the time. The strategy may use specific network activities from which to draw messages to identified target groups, such as bandwidth sharing by a number of telecentres in the country to illustrate the challenges of connectivity and how networking might help.

[edit] Elements of an effective network communications strategy

A good network communication strategy needs:

- Defined **goals and objectives** – with specific reference to timeframe and desired outcomes
- Identified target **audiences** – to tailor the tone and format of communication activities to the preferences of each audience. Networks may need to engage in some form of intelligence-building exercise to learn more about their target audiences in order to better

understand them; that is, what information they may need and are most receptive to, and how they prefer to receive their information (such as text-based or face-to-face)

- Appropriate **tools** and tactics – that help network reach their audiences more effectively, at a reasonable cost and with high returns. Tools may include news releases, pamphlets, brochures, electronic bulletins, newsletters, CDs, videos, radio advertising, and so on. Tactics are the venues used to disseminate the network's messages and products such as activities and events.

A simplified communication strategy template is shown in the following text box with related questions.

Box 4.1 Communication Strategy Template

CONTEXT: What is the political/social/cultural/economic environment that could influence your initiative?

STRATEGIC CONSIDERATIONS: What trends, potential strengths, weaknesses, opportunities and threats are inherent in your initiative?

OBJECTIVES: What you are trying to achieve?

TARGET AUDIENCES: Whom do you need to reach to achieve your objectives?

MESSAGES: What messages must you deliver to your target audiences to achieve your objectives?

TOOLS AND TACTICS: What approaches you will take to deliver your messages to your target audiences to achieve your objectives. Include a budget

MONITORING/ EVALUATION: How is your strategy working? How did your strategy work?

Generally, for network communication activities to be successful, they must deliver their message in such a way that the intended audience (i) wants to hear it (ii) needs to hear it, and (iii) expects to receive the message.

The first step towards building a network communications strategy involves a clear understanding of the purposes of the network (and thus imagining what success looks like), as well as the identification of the people and organizations the network would like to influence in order to be successful. This may have already occurred in the early stages of network creation, or perhaps it can take place through a necessary review via some kind of participatory network analysis process involving network members and partners. It is preferably done though a face-to-face process, complemented by online communication using discussion lists or free web conferencing tools like Dimdim[2]. This preparatory work should define the goal, audience and appropriate tools and tactics needed to achieve communication-based outcomes. Including an

evaluation component allows for fine-tuning as the strategy rolls out, also helping to improve future communications efforts.

Participation in shaping the strategy by the member telecentres will help build support for – and commitment to – the strategy. It will also improve the members' capacity to manage individual communications activities, which is an added benefit to the network in the long run.

The following set of questions might be helpful to assess communications-related aspects of the telecentre networks. It is important to elicit responses and comments that are as concrete as possible:

- Who are the telecentre network's members and external stakeholders and where are they located?
- What does the network need to communicate?
- What means of communication are used among members and towards external actors?
- Are these means constraining or fostering the exchange of information and contact among the parties in any way?
- What are the perceived strengths and weaknesses of the network in terms of communications?
- What and where are the main 'information plugs' in the telecentre networks? How can they be removed or avoided?

It is important to use the information obtained from the above questions (in addition to any other pertinent ones) to determine the network's communications objectives, specific communications activities and expected results. It is important to determine some simple indicators to track attainment of the objectives – the simpler they are the more likely telecentre network managers will use them. The following items refer to the key elements in the operational (or logic) framework, as seen in table a logic touch upon objectives, activities and results, as well as the way to track the strategy's progress.

I think this section deserves a new title here, or at least a sentence or two describing what is about to be explained: OK, I introduced a bit of a bridge (it does follow from the paragraph, but it´s not that clear).

Objectives – Communication is a tool, not a goal in itself. Communications objectives have to be realistic and achievable – there is no point in trying to convert a telecentre network into the telecentre equivalent of the American national news network CNN. Some examples of key communication objectives are:

- To improve communication flow with the network.
- To keep the member telecentres informed about the telecentre network activities and progress.
- To enhance interaction between local communities and their telecentres.

Activities – These activities allow the network to accomplish its communication objectives. In designing the activities, it is useful to determine (i) **what** (to identify the activity itself: it can

help to draw an informative chart, or start a blog, etc.); (ii) **who** (to identify the person or team that will execute the activity); (iii) **when** (to come up with a timetable for the implementation of the activity). It is also important to identify the appropriate tools required to conduct the activity, including face-to-face events (like meetings, workshops, visits), documentation (newsletters, publications, web content) and online communication (emails, discussion lists, blogs)

Expected results – These are specific intended outcomes when activities are executed according to plan. Expected results should be achievable, measurable and traceable, for example, recognizing the frequency of a newsletter and not just its establishment. Measuring the progression of results instead of quantifying an indicator at the end of a given period makes monitoring feasible and useful.

Monitoring – An effective communications strategy requires regular updating. For this, telecentre networks need to track expected results against objectives and can ask questions such as:

- Were the intended people reached? What about other (unintended) actors?
- Did target audiences understand the messages?
- What steps can be taken to improve the outcomes?
- How can the overall communication strategy be implemented more effectively?

Table 4.1. A simplified example of how the operational elements from a communications strategy canbe described .

Objectives	Activities	Expected results	Indicators
To improve communication flows within the network.	* Creation of an internal electronic bulletin with a weekly circulation.	* Most of the new information about activities, projects, services and events from network members is circulated on a timely basis; • The bulletin is a collective product generated mostly by network members with support from the network's coordinating unit.	• The bulletin maintains a stable volume of content on a monthly basis, growing by 20% by the end of the first year; • More than 70 % of the articles and content is produced by staff in the member telecentres; • There are

			replies from members to each bulletin, and the numbers of replies grows two-fold by the end of the first year.
	• Creation of a discussion list to encourage information and knowledge exchange within the network.	• Most of the key thematic aspects in the network's strategic plan is debated in the form of individual discussion threads; • The network's discussion list becomes one of the most referenced and recognized fora in the country for ICT4D issues, in particular to inform some aspects national ICT policy.	• In six months there have been at least 12 discussions threads about TCN topics; • More than 60 % of the network members have participated in the discussion list; • At least 100 people from outside the network have subscribed to, or participate in, the discussion list (gradually incrementing from zero at the start).
	• Creation of a wiki or googledoc for the telecentre	• Training is provided to most	• Four substantive documents published by

	network's internal use	network members about collaborative publishing; • Some of the most representative and substantive documents generated by the network are produced in a participatory fashion using these tools; • An e-bulletin is fully created on these tools after a testing period.	the network are created via the wiki or googledoc – including the yearly M&E report; • By year's end, the e-bulletin is fully produced and published with these tools.

Even the best communications strategy will lack value if the members of the network do not share its key elements, or if they lack awareness of those elements. Holding special team meetings among a small group of people who are responsible for the execution of the strategy will help to see that it is successfully carried out. It is also recommendable that the strategy is presented and discussed as part of the agenda of a telecentre network's specific events that involve larger groups, particularly during its preparation, and soon after implementation. The good news is that making the strategy well known will require some of the same communications tactics!

It is important to share the idea that the entire telecentre network is responsible for its communications agenda, and not just that of a few network members, or the staff of a coordinating unit. While leadership of a few individuals will have a significant effect on the attainment of comunication objectives, having most people in the network connected and feeding information into it is a more likely guarantee that the network will stay well informed. In this regard, individual telecentres should view themselves as both **antennae** and **broadcasters**.

A communications strategy that yields results (which is what any network member is interested in, and not simply 'chatter') goes through stages in a cycle, like the one in figure 4.1. Some of the stages in the cycle are also present during a single communication action (such as producing a news bulletin, or organizing a symposium). It is important to recognize the stages, as they will require different tasks and treatment. For example, sharing information can be a unilateral action, occurring quickly and using a computer. On the other hand, negotiation can turn out to be a painfully slow process, requiring the participation of various actors, and using a table, tea and biscuits as the main tools.

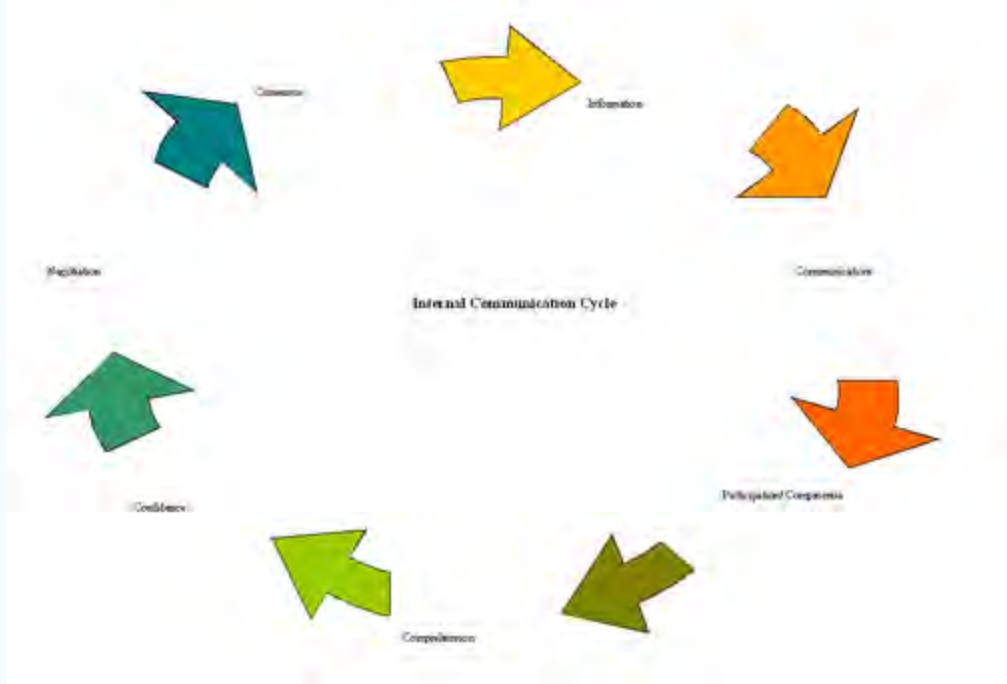

Figure 4.1 Internal Communication Cycle

[edit] External Communications

While external communication is usually included within the overall communications strategy of a network, it is often done implicitly. External communications may seem more detached from the day-to-day life of a telecentre network, and allows less control over its implementation (where most of the actors are by definition based outside the network). They are directed to very different types of recipients: sponsors, partners, local officials, state representatives, community members and academics, and possibly other telecentre networks too.

The tasks related to providing information to these actors and prompting their involvement are carried out differently than for internal communications. The means used can vary from actor to actor, as well as the language used. After all, the audience for external communications is generally heterogeneous, while for internal communications it is often more homogenous.

That is why the main challenge in external communications is to identify the best means to communicate to each actor. The way to communicate a message to a sponsor, in most cases, will not work with a community leader or with telecentre users. For example, a local leader may prefer oral communication to written communication – let's remember than even today, at the start of the 21st century, some cultures are based on orality. A development agency or a newspaper will prefer written information because they can process it and save it. At the same time, establishing a relationship with a media outlet is also valuable, and that requires oral communications (phone calls, in-person visits, and so on). Thus, in our information society

context, the communications strategy should be able to include a flexible repertoire of instruments: analogue and digital, written and spoken, visual and text.

There is a wide range of communication tools available, many of which are free, to spread one's message. For example, a distribution list such as a Dgroup[3] can be easily created which facilitates ongoing dialogue among stakeholders; including beneficiaries, sponsors, partners and the community. Not only do distribution lists bring multiple voices to the network, but they also help telecentre network members to provide feedback to the network. On the other hand, a periodic (weekly or monthly) e-bulletin is an efficient means to inform external parties about TCN activities, needs and outcomes. For real-time information dissemination, an RSS (real simple syndication) or Atom newsfeed may be a good idea.

In addition, other web 2.0 tools such as blogs, Twitter, social network tools (such as MySpace, Orkut, Facebook, and ning) allow for a multimedia mix of information to be offered, including pictures and video clips. This provides enormous opportunities. For example, wouldn't a partner/funder like to see short clips on how its supported telecentre network is working with local teachers to enrich their classrooms with fresh, new content? How valuable is it for a local television station to access content about teenagers from conflictive parts of town who are stimulated to 'create' (eg. videos with their stories, websites, etc.) rather than 'destroy'?

Choosing a language for communication is very important. When communicating with a sponsor, it is generally a good idea to use more formal language and articulate the results and processes advanced through the telecentre network. When communicating with local partners, on the other hand, it can be useful to adapt a style more closely based on how they communicate.

Candidly sharing lessons learned with sponsors is a way to generate trust with that sponsor, such as why an activity failed, and how learning from that failure will help the network grow. It will also help to sustain a longer-term relationship, as sponsors (particularly development agencies) are aware that all projects find difficulties. Sometimes the outstanding feature about a project is how it went about overcoming its difficulties.

Finally, one can take advantage of electronic and print media as key infomediaries to the outside community[4]. These institutions can help to deliver important messages, engaging new audiences and potential partners. Media organizations are constantly in search of interesting stories that affect human development. Telecentre networks are working with telecentres whose business is to improve people's lives. TCNs can attract and maintain good contacts in the media using press releases, regular short stories, video clips, etc. about how telecentres are making a difference and providing useful solutions to public interest issues. Local media outlets want to access 'human stories', and pre-packaged news bits, with data, quotes, pictures, etc. It is also wise to have network spokespeople available and to provide these spokespeople with key messages to which they can refer should they be contacted by media.

[edit] What about communications for member telecentres?

The communications strategies and practices of a telecentre network should also include ways of supporting member telecentres with their own communications needs. Ultimately, as in other

aspects of the telecentre network, it is the work of the individual telecentres that determines its success or failure. Telecentre staff seldom has the expertise or time to put together a well thought-out communications plan.

This is one of the aspects where being part of a telecentre network may really pay off. Telecentre workers understand the needs of the local population and their cultural norms, and TCN staff can help workers to build capacity through the following:

- Devising and putting into action a community outreach plan, in effect 'taking the telecentre outside its walls and into the streets'. This can include visits to schools, civic organizations, business centers, marketplaces, etc.
- Producing content (such as video clips) that can help telecentre staff to better connect with the community.
- Using ICT tools to help them communicate with their communities and stakeholders.
- Generating and extending the TCN 'brand' to the individual telecentres, for greater visibility and publicity (and by providing templates, key messages, logos and other materials to help facilitate this).

Telecentre network staff can also help directly organize and implement various communication-related activities, such as:

- Moderating discussion lists where telecentre staff share and debate about communications with their users.
- Generating content that can easily be adapted to local telecentre needs to contact and engage local citizens, such as poster templates, interview scripts, surveys, etc.
- Creating network-wide activities that promote local participation, such as contests, scholarships, or art displays.

[edit] Case study – the E3 Project in Sri Lanka [5]

The E3 project started in June 2008 to enhance the sustainability of 60 telecentres in Sri Lanka's Uva province. It was prompted by a monitoring and evaluation process carried out by the national Information and Communications Technology Agency (ICTA), which found that the lack of communication was one of the key issues challenging the sustainability of the Uva Telecentre Network.

Part of the project www.shilpasayura.org involved the creation of a network communications platform developed by a national organization, the E–fusion Regional Impact Team (RIT), with tools used for training and content sharing, connecting key stakeholders as shown in the image found below (Figure 4.2). It also facilitated monitoring tasks for the network. The platform is depicted in the graph below.

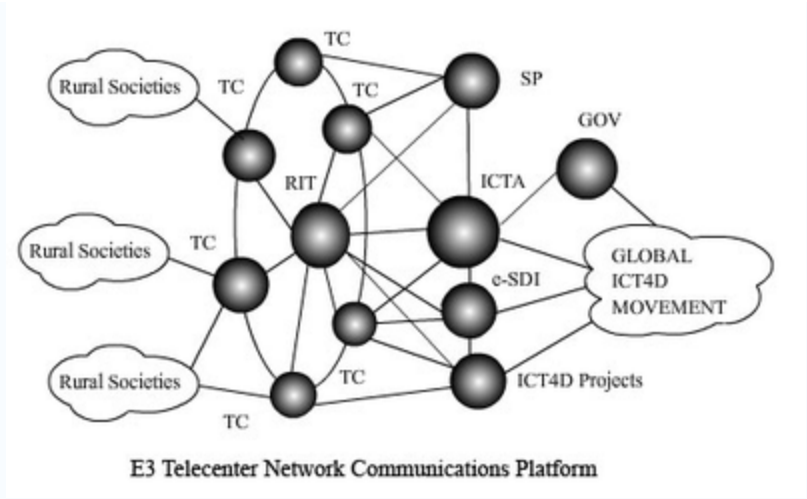

Figure 4.2 E3 Telecentre Network Communications Platform

A significant challenge was to establish a communications platform where only slightly over half (52%) of the 60 telecentres had internet access. There were also different levels of language and ICT skills within the network.

Methods

The E–fusion Regional Impact Team assessed telecentre needs by conducting small workshops, telecentre visits, and questionnaires to help design the communcations strategy. The network communication platform provided messaging services among RIT, telecentres, ICTA and service providers.

Network communication strategies

Transparency and open group communications helped to develop trust among members. The creation of a ‘network think-tank’ increased stakeholder involvement. Connecting members of the telecentre community with government and business helped to increase network reach. Telecentre operators were empowered to represent their centres which increasing local ownership. Periodic monitoring reports helped resolve network issues. All communications were carried out with authenticated identity. Forming a Telecentre Community Association created a front end to represent the network.

Content, tools and channels

Using online tools and e-content in ‘local language’ increased participation and reach. The communication media used were email, blogs, fora, discussion lists, ning social networks, telephone, Skype web-conferencing, chat and SMS messaging to communicate effectively within the network to share and transfer telecentre knowledge. Regular workshops helped to improve inter-telecentre communications, knowledge networking and resources sharing.

Feedback

Forums, surveys, activity photos, videos, blogging and comments captured feedback to improve the process.

Outcomes

Before the E3 project, each of the Uva telecentres were isolated, individual competing entities. The nine-month duration of the first phase of the project improved network communications to make telecentres truly emerge as a telecentre network. The E3 network communication strategy assisted in the effective delivery of telecentre support services, content, capacity building, advocacy, research and reporting. Advocacy actions motivated the emergence of a Telecentre Sustainability Network (TSN), receiving national and global ICT4D research attention for telecentre sustainability development.

Lessons learned

The diversity within Uva telecentres was a challenge for network communications to bring loosely bound individual telecentres into a network. Creating some early benefits helped, such as deploying an e-learning platform to set off joint activities among telecentres.

There were, however, some problems along the way. Some telecentres, even if individually successful, did not contribute enough to the network with their skills and resources. Lack of a gender perspective (as revealed through women's reluctance to engage in network-wide activities) also affected network communications. Negotiation and awareness improved the situation, but some individuals' positions did not move much over time.

Effective network communications require openness, use of local languages and effective tools. In a loosely bound network misunderstandings can always occur; hence network messages require careful consideration of content and channels of delivery. For example, if a message with information of general interest is not received by all telecentre, it can negatively affect the entire telecentre network. Therefore, making feedback mechanisms available and having processes for corrective action are a must.

Postal mail, even if not considered 'modern', can be an effective network messaging element to involve non-ICT literate stakeholders (and amazingly enough, some telecentre owners may fit in this category).

Open communications help to motivate small players to play big roles in the network and informal communicationsare useful in assessing the effectiveness of network programs.

[edit] Quick Tips about Communications Strategies and Practice in Telecentre Networks

[edit] Internal Communications

- A healthy communication flow among the members is the energy that keeps a network active and feeds the solidarity and confidence required for the TCN to be successful.
- Nothing replaces face-to-face communication; plan for annual meetings.
- Make sure that the network objectives are well known, and at least generally accepted by the members.
- Use web 2.0 tools, which simplify making contributions and producing content.
- Foster confidence and trust between your users. You won't openly share things if you do not trust the person you are working with.
- In order to create incentive for communication among network members, it is important to name one or two facilitators that can help you encourage participation.
- Promote discussion fora that will help to keep the network active.
- One of the best incentives is to help individual telecentres better communicate themselves: make this a central part of your communications strategy.
- In case you do not have the level of participation you were expecting, get help! Some individuals in the network may be able to assist you in motivating other members. And even better, revise stimuli to communicate for the members.

[edit] External Communications

- Focus on your target audience and the main ideas you want to communicate.
- Try to personalize messages according to your audience and the goal you want to achieve.
- The message has to be concrete and clear; remember that 'less is often more' in public communications
- Your message structure always should have an introduction, message body and conclusion.
- Make sure that your audience has a way to contact the telecentre, and provide a formal, institutional email address (ie. star-telecentre@telecentre.org), a postal address, and a phone number. Most importantly, respond to those contacts timely (within 48 hours if possible).
- Create a blog for your telecentre network. It will make it easier to keep your partners and possible donors informed about the activities of the telecentres and their communities.
- In a visible place in the telecentre, prepare a poster with all the information regarding the telecentre, its rules, schedule, etc.
- Keep the community informed about telecentre activities and how it is accomplishing its goals. Also let the community know if you need some help.
- Quality over quantity: how you communicate is more important than how much you communicate.
- Think and communicate positively but credibly: in the case of failures (which are normal experiences and occur regularly) try to emphasize the lessons learned.
- Get the most out of the Web 2.0. Use social networks, blogs, tags, YouTube, web picture albums, etc. to let the world know about your TCN and its telecentres.

[edit] References and Resources

[edit] Chapter 5. Financial Sustainability for Telecentre Networks

[edit] Financial Sustainability for Telecentre Networks

Aminata Maiga (AFRIKLINKS, Mali)

This chapter identifies resource challenges, business models for telecentre networks and discusses ways for networks to undertake resource mobilization programs. Since the first telecentres were established in the early 1980s, a number of different models have emerged around the world. The models often take varied management approaches, technologies, connectivity options, and services. Yet no single telecentre model has so far proved inherently superior in terms of ensuring financial sustainability. Issues underlying financial sustainability of telecentre networks have been mostly similar to those of the network members – ie. the telecentres themselves. The difference however, is that as a network, there is more potential for finding working solutions.

[edit] The Financial Picture for Telecentre Networks

The telecentres of today and of the future are increasingly networked telecentres. The impact of telecentre networks has been significant in terms of providing quality support to telecentres, strengthening their mission of delivering ICT training and services to rural and marginalised urban communities, and in bridging the digital divide (or specific digital divides, such as urban-rural).

Telecentre networks function well if they have a heart – a core team of people – that champion the exchange of ideas, propose projects, ensure lessons are documented, make connections with potential partners and oversee long-term planning. It does not matter whether a network is virtual or physical. But there is only so much that a core team can do if it does not have the financial resources needed for the tasks at hand. Ultimately, a lack of resources often results in frustration and undermines the spirit of the network. In fact, the collapse of many telecentre networks has been attributed to lack of financial resources.

Before entering into the relevant aspects of financial sustainability for telecentre networks, we will start by quickly identifying other dimensions of TCN sustainability, besides the financial one, which have an effect on overall sustainability. The remainder of the chapter focuses on financial sustainability:

- **Social sustainability** – This may be the most influential dimension of the various types of sustainability, since it is driven by demand of its members[6]. As Fillip and Foote say "sustaining a network is first and foremost about providing value to the telecentre managers who belong" (2007, p. 151).

- **Institutional Sustainability** – It is beneficial to increase the scale of telecentre networks through partnerships with other telecentres, and with sectors including government, the private sector, academia, and civil society. By involving an extended set of organizations, responsibilities and costs are shared, collective commitment is increased, and risks are reduced.
- **Technological sustainability** – Telecentre networks require good access to the proper technologies and skilled technicians needed to provide adequate services to the member telecentres.

Box 5.1 Achieving institutional sustainability: the Brazil Community program

The project Brazil Community (www.ec-corp.com.br/midia/2002/nov/cam_comunidade.htm) was created in 2002 with the purpose of creating so-called 'Community Rooms' that have internet access in the whole country. It put in motion an interesting public-private partnership model in telecentre-related initiatives.

The partnerships model was based on a union between the Brazilian government, civil society organizations and the business sector. In so doing, it gained the commitment of a diverse set of partners, each with different contributions and responsibilities:

- Intel (www.intel.com) donated equipment for the telecentre;
- Microsoft(www.microsoft.com) provided licensed software;
- Web-Class (www.webaula.com.br) offered the technology for a distance education program;
- Planner (www.plannermob.com.br) provided Marketing Intelligence Service tools;
- Caixa Econômica Federal (CEF) (www.caixa.gov.br) provided some of the funding;
- The Federal Data Processing Service (SERPRO) (www.serpro.gov.br), committed to giving technological support to telecentres;
- Câmara Brasileira de Comércio Eletrônico (www.camara-e.net) provided a little funding and e-commerce technology;
- An e-consulting business (www.ec-corp.com.br)created the web portal www.comunidade-brasil.net;
- The NGO Moradia e Cidadania (www.moradiaecidadania.org.br), supported local workers;
- The NGO Sampa.org (www.sampa.org), provided telecentre management training; and
- Brasil Telecom (www.brasiltelecom.com.br) offered free internet access.

[edit] Financial challenges for telecentre networks

Telecentre networks face various types of challenges while trying to achieve financial sustainability, as listed below:

- Low financial diversification: Many telecentres and telecentre networks, in their initial stages, are funded 100% by donors, and later experience a reduction in this funding. This generates a high level of risk if key donors withdraw their support.

- Restrictions on the use of funding: Some grants include restrictions that inhibit a telecentre network's ability to grow and develop independently. That is, some grants may only be provided to carry out specific activities or hire particular staff for the duration of a project. Moreover, there are usually no provisions for subsequent funding. It is important to limit expectations to the explicit terms of an agreement.

- Lack of funding for non-project work: It is often hard to secure funding for advocacy and institutional strengthening activities. For example, in many countries, the benefits that telecentres and ICT4D activities may bring to communities need to be more widely and publicly communicated, since these tasks figure under 'soft' operations, and are therefore hard to finance outright.

- Proposal-related hassle: There are often difficulties related to the preparation and presentation or follow-up of funding proposals. Each donor organization requires the submission of proposals in a particular format; and naturally, each donor targets specific interests. In this way, the preparation of multiple proposals often becomes too time consuming for TCNs with limited capacity (with respect to technical and human resources).

- Project-only funding: Funds are often limited to short-term projects that are financed by a handful of donors (such as national governments and international agencies), compared to a lack of funding for projects supporting overall organizational development or projects with a broader social impact.

Bearing these challenges in mind, it must also be understood that if many telecentres in a network are not sustainable themselves, then it is difficult for the network to be sustainable as a whole. Therefore, apart from supporing telecentres individually, telecentre networks also have a vested interest in contributing to their financial stability.

[edit] Planning for financial sustainability

Effective financial sustainability starts with a clear strategic plan: a long-term perspective of what the network is about and what it plans to do. This strategy should outline network objectives, priorities, resources required, and a means to track performance and resource levels. Each of these aspects is discussed in detail in other chapters of this guidebook, where this chapter focuses mainly on locating resources for the implementation stage of a telecentre network.

A telecentre network strategic plan may include obtaining resources from internal and external sources. Internal financial resources may include:

- **Membership fees** – Who pays, and how much, are questions that should be carefully thought out. Collecting membership fees requires transparency, accountability and ample reporting on the part of the network leadership. Otherwise, fees can become a source of network instability.

- **Consultancy services** – Networks can provide technical services for a fee to their telecentre members, governments, private or civil society organizations. In several countries around the world, telecentre networks are leaders in universal access issues and enjoy good access to communities, which makes them valuable project partners. For instance, UgaBYTES in Uganda provides technical maintenance support to telecentres at a discounted fee.

- **Sale of products** – This may include discounted software, hardware, training programs or telecentre supplies. Products that are connected to the core business of a telecentre network may be the most feasible to sell since they may not require the development of new skills.

Box 5.2 Growing the market for telecentres: Cooking school (and other services)

"I had a chat with Mohamed (Afriklinks) yesterday – kind of trying to digest the focus of eight telecentres that were launched early this month by government of Algeria which provides 100% support. This program is supported by InWent (Germany). They visited a telecentre in Djelfa, Algeria almost 300 km from the capital.

The catch for me, these telecentres provide certified training in cookery and adult literacy in addition to your usual telecentre style services. I think that is really revolutionary. This is why; if rural communities where most telecentres are located are largely illiterate and therefore unable to effectively use most services, how will a telecentre helps to address that problem and therefore drive more use?

You have probably heard of telecoms and other private companies spending time and energy to grow the market…working with young people and investing in schools (tomorrow's market). How can a telecentre grow its future market? Well, adult literacy training is one great way to do just that".

This blog post has been drawn from:

www.digitaldivide.net/blog/Meddie/view?PostID=27668

[edit] Resource mobilization from external sources

There are many resource mobilization opportunities from external network sources. Perhaps this is an area within which telecentre networks have focused significantly, but still not enough. The foundation of a good external resources mobilization plan is based on a strong awareness of what a network can do well, knowledge of its internal capacities (to offer as services to other organizations) and a recognition of the organizations that might be interested in working with the network. This implies an objective partnership analysis, and one that requires regular updates.

One way for telecentre networks to raise external resources is to directly cover **operational overheads**. This may mean getting another organization to pay for the salary of key network

staff member(s) or paying for the internet connectivity. The network, in this instance, does not have to receive the money directly.

Telecentre networks can also mobilize external resources through **endorsements**. When a network can demonstrate its network value in terms of quantity, it is possible to use it to endorse products and services in return for economic value. Some telecentre networks such as the Brazilian Telecentre Information and Business Association (ATN)[7] have developed a highly regarded public reputation so that private sector companies and local governments may even provide funding just in order to be associated with the network brand. Clearly, network value can be highly valuable if it is properly communicated and marketed.

One of the most significant ways to generate resources externally is for a telecentre network to act as a **distribution channel** of content and services. This implies working with private sector companies, civil society organizations and governments to distribute, implement, test and demonstrate products or services. TCNs can obtain significant resources this way. It gives networks an opportunity to expand the range of products and services they offer beyond the traditional ICT-related ones. And it places TCNs as significant actors in public-private partnerships.

Telecentre networks with the capacity and processes in place to act as distribution channels can work together with international partners such as UN agencies, multinational corporations with corporate social responsibility programs and universities. They can work either from the demand side, such as bringing online university courses to telecentre users. And they could also work the supply-side, such as offering project collaboration opportunities for a UN agency at the telecentre/community level. For instance, the partnership between the Brazilian Telecentre Information and Business Association (ATN) and Microsoft will provide 40,000 Windows XP/Office Package licenses for telecentres. Another benefit from this partnership is the email service hosted and operated by Microsoft in the platform Windows Live Custom Domains.

ATN provides another interesting example of helping telecentres' financial needs with respect to university education. Through a partnership with the Metropolitan University of Santos (Unimes), telecentres are able to offer graduate and post-graduate courses accredited by Brazil's Ministry of Education. Through this program, students attend classes once a week in the telecentres which are given by teachers from the university. Throughout the week, students can use any computer and other telecentre services they may need. By the end of the course, students receive an accredited degree while the telecentre receives 20% of each student's monthly payment.

Perhaps the most frequent approach taken presently by telecentre networks is to raise external funds is via **direct project funding**. However, this is also the most unreliable of all sources. External funding may come from national or foreign donors. It is common for industrialized countries such as Canada, Finland, Australia or Spain to provide telecentre services for free to individual users in their territory. The Government of Western Australia, for example, gives recurrent support to most of an estimated 150 telecentres via its well-established WA Telecentre Network [8] and makes use of the distributed potential discussed in the previous section to provide a range of educational and government services to the local communities served. This

implies that the Western Australia Government considers its financial support to be an investment and not a simple ‘donation’.

Less developed countries that try to follow this type of highly subsidized project funding for telecentre development may find it to be financially unsustainable. It may lead to an abrupt stop in funding, or limit the extent and reach of telecentre programming. But this makes an even stronger selling point for supporting telecentre networks: if, as a government, you cannot maintain individual telecentres, at least try to strongly support telecentre networks that will work to stabilize the situation of the individual telecentres.

In the Philippines and Brazil, as in Australia and Spain, some telecentre networks are run by government organizations where workers and operational fees are paid for by the government. In Mali, the government wants to establish telecentres called ‘Community Access Points’ (CAPs) in all 703 communes, and to provide support for them (at least initially). The existing telecentre network in Mali, called FETEMA, is lobbying the government to demonstrate the advantages of networking and to send the message that FETEMA has the required expertise to support telecentres – and can probably do it more effectively and efficiently than government officials with lesser expertise and who are busy with other issues. This is a proper way to seek official support for a telecentre network, in promoting a partnership with a government department.

[edit] Social enterprises and telecentre networks

Telecentre networks can turn to the ‘social enterprise’ concept for effectively and efficiently complying with its essentially social objective (ie. to support its member telecentres), as a logical extension of the social enterprise models exhibited by individual telecentres. This model can be applied to income-generating activities to supplement existing program funding and individual telecentre contributions.

The term ‘social enterprise’ refers to any entrepreneurial activity that generates revenue for an organization (that is, the ‘enterprise’) while at the same time helping to achieve social objectives. A network that ‘sells’ market information to telecentres to strengthen their services in the community and allows them to generate revenues is operating as a social enterprise. A different example could relate to a national NGO that wishes to disseminate good practices and training about family planning but that finds it difficult to reach municipal areas - the national telecentre network could then negotiate a fee with the NGO to send the relevant content to its telecentres, and thus provide the information to the NGO’s target audience in effective manner.

A social enterprise model for a telecentre network can bring a series of potential benefits such as:

- Increased and diversified income resulting from a social enterprise’s ‘profitability’, which helps to reduce dependence on uncertain funding sources;

- Greater flexibility because, unlike grant funding, a social enterprise’s income is not restricted to a specific use, thereby allowing networks to use the funds in ways that best meet their organizational needs;

- Improved overall organizational performance as the proper financial and managerial discipline required for running a successful social enterprise will improve the network's organizational efficiency and planning skills;

- A positive impression on donors as they may appreciate that the telecentre network is being proactive in generating its own resources;

- Increased visibility and network self-confidence: marketing for social enterprise purposes can reach new audiences for the network, making the same the network leaders and staff realise that they have the ability to generate income on their own.

A telecentre network can manage more than one social enterprise, depending on its size (or, to be more precise, its management capacity). It also depends on the level of demand from telecentres or other clients (such as government entities or businesses) for delivering value-added services such as health content, tax information, delivery of official forms, and so on. While social enterprise models may bring significant benefits for telecentre networks, network managers should be aware of potential limitations. Managing a social enterprise of any type is not easy, and it may run against local economic or business cultures. Social enterprises also require a certain level of financial stability and expertise that not all telecentre networks have, and therefore they must be professionally managed. Furthermore, there is no direct recipe for success. Rather, each social enterprise model should be tailored to each particlar telecentre network's mission, and level of capacity, expertise, and technical skills.

According to Loïc Comolli, a social enterprise is not a way to get 'quick money' because it requires a long-term financial strategy and it may take several years before a financial return is realised (2008). In addition, as with any kind of business, a social enterprise is vulnerable to socio-economic conditions and market fluctuations, and if it not well managed it can place the network's reputation and financial integrity at risk. A social enterprise's activities may also cause a variety of internal organizational and cultural dilemmas as well as ideological conflicts with the core mission of the TCN.

[edit] Types of social enterprise models for telecentre networks

There is a range of possible social enterprise elements or activities that can be appropriate for telecentre networks. Some are closely related to the network's mission to strengthen telecentres, while others may be unrelated to the network's core missions and thus have a more limited – or even nonexistent – direct social impact. We take a look now at some of the various types, with tendencies ranging from lower to higher profit generation.

What will emerge from this quick examination of social enterprise aspects in telecentre networks is an apparent trade-off between network mission impact and impending profit levels. In general, the less related the social enterprise is from the telecentre network mission, the lower the resulting 'impact' of the activities in achiving network goals, but the higher the expected profit. Working on activities unrelated to the network mission may prove risky to the TCN, because the market and product is less familiar. In any case, the primary goal of non-mission related social

enterprises would be to generate enough revenues to either cover operational costs (what is commonly referred to as 'overhead') of the telecentre network and/or support specific projects.

- Implementing telecentre network program activities and providing services specified in the telecentre network's charter without charging any fees from members: For example, a TCN may provide IT support to telecentres which strengthens a telecentre's capacities, but additional funding is still required from other sources to pay staff members. The social impact of this kind of activity is high (telecentres cannot operate without staff) but the network relies 100% on grants and subsidies. Generally this kind of telecentre network is not seen as a social enterprise but rather as a type of NGO unless they use their social enterprise label to access funding as a regular component of their income generation strategy.

- Using a partial cost-recovery goal, covering a percentage of their existing program costs through fees. This implies that the remaining costs would have to be covered by grants or donations. For example, the TCN may charge fees for providing IT support to telecentres. This helps to increase the prospects of sustainability of the program by reducing the amount of grant funding needed.

- Offering new services to existing clients (such as telecentres). For example, they can sell ICT course curriculum to telecentres to offer higher quality training to community members. This type of social enterprise has a high mission impact, ie. it aims at the core purpose of the organization, its mission, and is funded by cost-recovery. It can either allow for these tasks to be performed on a break-even basis or may even have a potential to create a financial profit.

- Offering extended program activities to new paying clients. For example, a telecentre network may charge fees for IT support for local schools or NGOs for a small profit.

- Providing completely new products or services to new paying clients. For example, a telecentre network social enterprise that sells refurbished PCs to non-profit organizations and to the general public is not directly related to the network missiong since it does not directly involve the strengthening of telecentres; not in the service delivery, nor in the sharing of revenues from the enterprise. The overall goal is to make a profit that subsidizes the telecentre network's core activities and organizational development.

Since telecentre networks support and interact with a large number of telecentres (sometimes numbering in the hundreds or even thousands), the type of social enterprise that strikes a better balance may be one that provides new product or services to the existing clients (that is, member telecentres). At any rate, a rigorous analysis of TCN objectives, telecentre needs, revenue streams and resource mobilization possibilities is always required. The most appealing scenario, in most cases, is one where both networks and telecentres generate some revenue, offering products and services that are useful to the communities.

The Rural Center of Digital Inclusion (CRID) (www.multimeios.ufc.br) based at the Federal University of Clara (www.ufc.br) presents an interesting example of a social enterprise within a

telecentre network. A project they run helps to mobilize the community to become acquainted with the process of digital culture, as a road towards 'knowledge transformations'. As stakeholders in a public-private partnership scheme, the project involves rural communities in managing the telecentres, which offer services in digital inclusion, educational informatics, distance courses and telecommunications in a context of social, personal, economic and cultural empowerment. The telecentres are well-managed, the communities are empowered, and useful services are provided to the users of the telecentres.

[edit] Case Study - A Project Partnership with Malian Telecentres

"Building the capacities of young girls/women who are school drop-outs through Malian Telecentres: A partnership between Afriklinks, Microsoft CTSP and FETEMA"

[edit] Background

Telecentres in Mali do not typically receive subsidies from initial funding partners to support operating costs. Among the various types of telecentres that exist, only those known as Community Learning and Information Centers (or Clicks) ever received direct subsidies, which ended in March 2005. The role of Afriklinks and its partners is to support these individual telecentres to achieve a higher level of sustainability (including within the network itself).

With the support of telecentre.org, in addition to technical support from Afriklinks, the Federation des Telecentres du Mali (FETEMA) was created in 2006. However, FETEMA needed additional funds to become operational as an independent entity. Most of its funding was originally supposed to come from network members. But annual subscription fees were not allowed to cover network activities, and Afriklinks' staff in Bamako constituted the de-facto permanent secretariat of FETEMA, esentially providing free human resources for the federation. In order to mobilize resources, therefore, FETEMA carried out many formal and informal meetings with potential partners. This case study is the result of one of those meetings.

[edit] The project

This project process started in Benin during the African Telecentre Leaders' Forum that was held at Centre Songhai, in December 2007, where the Afriklinks team met with Microsoft representatives. We learned that Microsoft can fund community based ICT projects, and we knew that the person dedicated to Mali-based projects was based in Senegal. After initial contact, we learned about the eligible areas for project funding at the community level, through Microsoft's Community Technology Skills Program (CTSP) initiative.

In Mali, many young girls drop out of school because they marry or have children at a young age. The majority of these girls do not have access to any 'professional' training of any kind, due to their poverty level, or for cultural reasons (for example, their husbands are not willing to pay to send them to another locality in order to attend courses). These young women therefore stay home to take care of domestic chores, and have little to aspire to besides raising a family.

There emerged an opportunity to develop a project to provide these young women with ICT skills. The project covered their training fees, which in turn could help them make a new start. They were given the chance to improve their lives (if allowed the possibility to apply for jobs or manage a personal activity at the local level), while having access to useful information in telecentres which enabled them to better care for themselves and their families.

[edit] How it was designed

We submitted a proposal online at the Microsoft Unlimited potential website in June 2007. Two months later, we received an invitation to participate in a workshop organised by Microsoft in Senegal as a potential partners. The cost of travel (about USD $1,500) needed to be covered by the invited organizations, and Afriklinks invested in the project and sent one delegate to this workshop. There were meetings with Microsoft to clarify doubts and answer questions about the project, and one month later (in October 2007) the proposal was selected. The grant was for USD $50,000, which allowed for approximately 200 young girls/women to be trained through the community telecentres.

We opened a bid for FETEMA's members to apply to be project partners to help with the execution of the project. FETEMA members were informed through the federation website and the distribution list about the project, including eligibility criteria. Twelve telecentres were chosen according to the manager's level of technical capacity, as well as the availability of adequate equipment. We used communication via the local community radio over a two-week period to broadcast project information and beneficiary criteria in French and in at least one local language. A national press conference was held to formally present the project and the locations of the chosen telecentres.

[edit] Project outcomes

After the first year of implementation, 42 young girls out of the total 200 involved in the project got a job in their communities. The remaining girls were either hoping to open their own local cybercafés, or to continue studying to obtain a professional diploma.

The project budget covered the telecentres' training costs, and it provided FETEMA with some core funding (approximately 5% of the total funds). All telecentres involved in the project agreed to share their resources between them.

We see this activity as a social enterprise that permitted young girls/women at the local community level to develop ICT skills, bringing some revenue to individual telecentres, and also to the network as a franchise fee.

In 2008, Afriklinks presented another proposal to Microsoft to help young girls create their own businesses. If approved, the project will receive USD $50,000 to be implemented in February 2009. The project would allow for ten new telecentres to be created by Afriklinks using refurbished computers, to be managed by some of the newly trained girls in their communities. FETEMA will order the refurbished computers and re-sell them to telecentres that need to improve their technical equipment, getting some revenue in the process.

[edit] Lessons learned

- The rather new FETEMA executive board, whose members are fully employed within the telecentres or their hosting institutions, did not have the capacity to write effective proposals at the time of application. It is therefore recommendable for the FETEMA telecentre network to initiate training sessions on fundraising for its members. The
- Afriklinks team had the capcity to submit the proposal due to support from telecentre.org and USAID, otherwise it would have been very difficult to conduct the process.

- Access to some initial funds is critical to begin network activities: the network needs to be able to hire people who competent in communication and fundraising activities.

- The project was one of 'learning by doing' for both the telecentre network and the selected telecentres involved.

Accountability and regular reporting to donors and partners are a crucial part of the fundraising process.

[edit] Quick Tips for Financial Sustainability

- Dependence on only one source of financing should be avoided, even if it provides significant funding or if it appears stable: the situation can change from one day to the next.

- It is (operationally) necessary to plan for the short term, called annual action plans. It is also (strategically) necessary to have long-term strategies and planning (that is, planning at least five years ahead).

- Financial sustainability for telecentres or for telecentre networks does not guarantee overall sustainability: other dimensions like social, institutional and technological sustainability are important as well.

- Content and services from individual telecentres can be combined into a network-wide catalogue of content and services, to respond to the needs of telecentres users all around the network.

- A telecentre network can help telecentres to expand their range of products and services beyond the traditional ICT-related ones, such as ICT technical support and training, to include health, e-government, and educational related products and services, for example.

- Using a proper distribution strategy, a telecentre network can offer products and services that come from national and international entities.

- Building the capacity of individual telecentres to formulate good project proposals (including the provision of helpful materials like proposal templates) is a practical way to

help the overall sustainability of the network by contributing to individual telecentre sustainability.

- It may prove useful to provide incentives for telecentres to keep financially contributing to the network, for example, by inviting only those telecentres to events who are consistently paying their fees.

- If a government is going to set up a telecentre program, or if it already supports telecentre programs, one of its central 'smart' investments should be in telecentre networks.

- It should never be assumed that project funding will be extended beyond the life of a given project. Therefore, any related measures for extended financing or in seeking additional project phases should be timely and taken accordingly. For example, networks can negotiate with the donor early on, arrange for project evaluations, become familiar with the donor's calendar, prepare new projects, etc.).

- Non-financial resource contributions such as expertise and human and technological resources can contribute powerfully to sustainability needs (including the financial sustainability).

- Social enterprise business models can be appropriate for telecentre networks, just as they are for individual telecentres. But they require a relatively strong level of institutional capacity to succeed.

- The closer a social enterprise is to the telecentre's overall mission of strengthening telecentres, the higher its potential impact.

[edit] References and Resources

Comolli, L. (2008). Increasing Telecentre Network Sustainability through Social Enterprise. Telecentre Magazine, 2:4, pp. 18-22.

[edit] Notes

1. ↑ InfoDesarrollo is an Ecuadorian portal that represents a good example of how external communication can be implemented within a network. It receives more than 16,000 visits per months and promotes the use of ICT in Ecuador along with other members of the Infodesarrollo network. The website is www.infodesarrollo.ec.
2. ↑ Dimdim is a free and simple web conferencing tool. It enables long-distance conferencing (using voice), and also enables people from all over the world to show what's one their desktop, such as pictures, presentations, PDFs, general screen shots and videos. Dimdim also has a whiteboard feature that makes it easy to work online. This is a good alternative for online meetings and working face-to-face. The website is www.dimdim.com.
3. ↑ Dgroups is another online platform that helps people meet, share information and collaborate in the international development community. It serves as a kind of

GoogleGroups or YahooGroups, but specialized for development issues. Dgroups provides features such as mailing lists, a document library and calendar. The website can be found at dgroups.org.

4. ↑ An infomediary is an entity that functions as an intermediary of information (instead of goods or services).
5. ↑ This case study has been provided by Niranjan Meegammana, Shilpa Sayura Foundation Sri Lanka
6. ↑ The sustainability of telecentres is highly dependent on their ability to offer the right mix of products and services. The types of services that telecentres provide is rapidly evolving, as the areas of eGovernment, eHealth, e-Learning, eCommerce advance. Telecentres and TCNs need to take advantage of opportunities to extend the benefits to the community at large, through their public access and geographical coverage. Some governments are pursuing the deployment of telecentres programs precisely as a means of ensuring that larger segments of the population are able to access government services and information through electronic channels.
7. ↑ The website can be found at: www.atn.org.br
8. ↑ www.dlgrd.wa.gov.au/RegionDev/Telecentres.asp

[edit] Chapter 6. Content and services

[edit] Content and services

Mahmud Hasan (Bangladesh Telecentre Network)

If communications are the 'nervous system' of a telecentre network, as expressed in Chapter 4, we could say that content and services are at the heart of a telecentre. It is through content and services that a telecentre serves the development challenges of its community and therefore provide opportunities for improved livelihoods.

Telecentre networks have a unique advantage in developing content and services. Networks may use their collective power to attract content and services originally developed by other organization – and then modify them for their own purposes. Networks may also engage directly in content and services development. This chapter discusses attributes and types of adequate content and services for telecentres, and how a telecentre network can play a central role in their provision. Examples are provided along the way about TCNs engaging in this process, drawing on a case study that looks at the Bangladesh Telecentre Network and its content and services development plan.

Since 2006, telecentre.org has supported a number of networks around the world to develop content and services that telecentres can use. This support has been linked to overall sustainability of telecentre networks. This is because telecentre.org believes that good content and services best advance the value of telecentre networking and are therefore key to sustainability for the telecentres.

[edit] The role of telecentre networks in the provision of content and services for local communities

Creating or even adapting the proper content or service packages for a particular community is an expensive and time-consuming job; and it is even more difficult for individual telecentres to create content and services.

Moreover, providers of content and services activities may not want to work with just one telecentre and its relatively limited constituency. But the aggregate level of demand of a group of telecentre practitioners can make the relationship more attractive.

There is an increasing recognition that networks can leverage content and services development, including the creation, packaging, training and provision of support services. Those content and services activities can then be replicated and distributed at the local and international level (such as through other TCNs). Herein lies the power of a telecentre network.

A telecentre network can also provide a channel for validation and feedback for content and service providers. This is an invaluable opportunity for any provider.

Individual telecentres can contribute to content development from telecentre networks by gathering information and knowledge from their communities. This may cover farming processes, trading opportunities, traditional herbal medicine, or local cultural practices for example. Telecentres have become a key source of data about local communities by development agencies and research organizations.

One interesting experience comes from telecentre.org's support of a number of networks and organizations to develop services through the competitive Rural Innovation Fund in India. These services included:

- A delivery model for Tara Akshar, a computer-based literacy program that teaches adult illiteracy in Hindi in 30 days. The service also developed a training system that integrates NGO and community based organizations as partners;
- Primary eye care through rural vision centres. The service was meant to increase access eye to care in rural India in order to reduce blindness;
- School management software to improve administration and teaching;
- An e-Commerce village web portal that provided communities with access to information, goods and services;
- A village disaster management system that records critical threats and available resources (such as personnel, equipment, support services) at village and national levels;
- An integrated rural milk procurement system that records milk collection to facilitate payments to farmers.

There are a growing number of telecentre network experiences with direct content and services development, although there is much potential that remains unexplored. Within the telecentre.org community, we can highlight the UgaBYTES initiative that a service called 'MySchool', which helps high school students in Uganda meet online to share educational resources and to ask teachers questions. The national network in Mozambique receives the collaboration of the Brazilian Telecentre Information and Business Association (ATN) to deliver online telecentre manager training. D.Net in Bangladesh provides another good references (see Box 3).

Box 6.1 An online portal of input services directory developed by telecentres in Bangladesh

www.jeeon.com.bd/thikana:

D.Net, one of the members of the Bangladesh Telecentre Network, started to generate a countrywide directory of service providers like agriculture tool vendors, hospitals, educational institutions, and law firms; where information listed included their address, products available, price range, availability etc. They created an information repository of 20 sectors from 26 districts. Total entries in the database number over 8,000.

D.Net used telecentres to collect this data by surveying local businesses. They trained telecentre staff and gave them a questionnaire in order to collect data. The telecentres thereby collected the data and send it to D.Net via email. Through this process, telecentres were able to earn additional income, while getting the opportunity to introduce a new service to the community. For D.Net, this process reduced the cost of their operation (also because they used the same telecentres to help them upgrade or further modify the data collected.

[edit] Attributes of Content and Services

The design and nature of content and services needs to be guided by the needs of telecentres, which in turn are determined by the needs – and perceived opportunities – of their communities. The particular mix of content and services useful for a telecentre depends on the community ecosystem, where the telecentre itself needs to become an important component of that ecosystem. The figure below describes the constituent parts of such a community ecosystem. Each of the bubbles represents people and organizations that have a concrete, staked interest. Telecentre managers and telecentre network staff need to ensure that everything provided by telecentres is focused on community needs and opportunities. This translates into a process where benefits reach a sufficient amount of ecosystem actors. This leads to the questions, what attributes should characterize those content and services activities demanded by local communities and channelled through individual telecentres? We can point out at least four necessary attributes: content and services that are appropriate, relevant, dynamic and authentic. Content and services may be determined as **appropriate** for a specific community or network based on any of the following potential benefits:

- Reducing costs by accessing different types of information and knowledge through easy and cheap communications;
- Creating new income opportunities for the community, by helping community members to gain new ICT or information skills, or to learn about new productive or business possibilities;

- Reducing the risk of possible loss or damage in a community, such as in disaster preparedness;
- Empowering marginalized communities and giving a 'voice to the voiceless'.

Figure 6.1 Community Ecosystem for Telecentres.jpg

Benefits may not always be quantifiable but they need to be visible. For instance, a cheap communications service (like IP telephony via companies like Skype) can let a mother know that her daughter and grandchildren are doing well far away from home. We have identified a few brief stories of social changes to illustrate, which are presented in Appendix 6.1.

Because appropriate content and services are determined by user needs, they need to be **dynamic**. Telecentre networks have to be prepared to adapt or even abandon services as needs change over time. In the case of a service that provides content (information) to farmers about pest control and management, if new pesticides emerge on the market or if specific pests arrive in the scene, the service will have to update its content, since erroneous information may prove to be very costly to the farmers.

The **relevance** of content and services determines their level of demand by the community. Proper packaging and delivery contribute to their relevance. Selecting the right delivery channels is critical in developing content and services; it may be necessary to use a combination of offline, online, print, SMS-based, or face-to-face channels. A network should also consider the characteristics of its telecentre users, such as their literacy levels. For instance, telecentre networks that work with high illiteracy rates will deliver more voice and video enabled content than printed materials. Content translation is also essential. The role of a good infomediary is not only to provide physical access to information but also to facilitate 'real' accessibility: that is, to make their meaning accessible.

Another important attribute of content and services is **authenticity**. Because of the potential impact of particular content and services to people's livelihoods, it imperative that networks seek validation to ensure that the information provided is accurate, complete and can lead to effective results, and that entities who are providing informational services are legal and honest. It is also useful if respected thematic experts and organizations validate content and service activities. In

fact, this validation or quality control function may be one of the added value tasks performed by telecentre networks.

[edit] Types of Content and services

Community demands for information and services may vary widely from one community to the next. For example, local demand for livelihood information and services depends on types of professions in the community. Demand may prove higher in rural and remote areas, given their isolation and more restrained access to information. A telecentre network can get involved by providing a potentially wide range of content and services, which can relate to any of the following areas:

- **Agriculture:** Agriculture is the main occupation of people living in rural areas. Many people engaged with agriculture are illiterate or semi-literate. But they have inherited indigenous knowledge. Typical demands for content and services from farmers can include: where to buy quality seeds, insecticides, pesticides or fertilizer availability (particularly from government sources). They also want to know about power cuts, fuel prices and the visits of agriculture extension officers. Farmers are certainly interested about information on daily market prices for agricultural commodities, but also on tools to test the soil quality, storage facilities (particularly for perishable products) or information about crop rotation and selection.

- **Health:** Health and healthcare related issues are basic to a community's well being, especially for rural women. The information demands on health issues are mainly on basic remedial issues related to diseases and health problems. Telemedicine services, including remote diagnostics and treatment follow-up are particularly valuable for rural people who can save precious time and money by not having to travel far away for some of those medical services.

- **Law and human rights:** Violation of human rights may be more prevalent in rural locations because people lack basic education on their rights, or information about their obligations. Local elites often take advantage of the functional illiteracy of the individuals within the community. For these purposes, databases of legal and human rights organizations, listings for the nearest administrative offices and information about citizen rights are valuable.

- **Education:** Students and teachers in rural communities often have little access to quality educational material. Youth in those areas may find it difficult to obtain higher education, so information about higher education opportunities, as well as procedures of getting admitted, is important for the rural community. Aging adult literacy is another major demand on the educational sector. Using audiovisual materials to promote adult literacy creates new opportunities for adult literacy as people can learn by watching and listening.

- **Employment:** People use several sources for job information. Personal, face-to-face contact is the most common source for employment information. In addition, telecentres facilitate access to job information via online services.

- **Commerce, business including self-employment/non-farm economic activities:** Telecentres can become popular places for business and commerce. Using a telecentre, people can find out information about their products (including market prices and additional information), input pricing and connections to global and national trading opportunities. Self-employment, especially rural micro and small enterprises capture the majority of rural occupations. Information about new business opportunities, business-related government information, business management, and online market places are major demands for this sector.

- **Disaster preparedness and management:** Disasters and natural calamities are an increasing occurance across the globe. Access to disaster-related information can reduce the severity of its effects, such as by allowing people a timely evacuation before a probable disaster strikes.

- **Government service:** Telecentres can be a popular mechanism and a primary access point for all e-government services. This can make it easier to download official forms, submissions, certifications and so on, cutting out 'middle men' who sometimes demand unwarranted fees to perform services for citizens.

- **Entertainment:** Telecentres are good source of entertainment for rural communities. Satellite private televisions and radio broadcasted programs are usually not available in rural areas. Telecentres may therefore provide good venues for entertainment: cartoons for children, drama shows, movies, sports for adults or online radio stations, are good examples.

- **News:** In many remote villages, access to the newspaper is absent. Currently, most newspapers have an online version and there are hundreds of news blogs. A telecentre is a common access point for all to access to this media online.

A key service provide by telecentres is **access to the internet**, used by relatively more highly educated and ICT-knowledgeable user groups for purposes as wide-ranging as (i) job searching, (ii) applying for foreign visas, (iii) learning materials, (iv) reading the newspaper (and writing to the editor), (v) writing and conferencing with relatives, (vi) exchanging business information, or (vii) simply playing games. Some users, mostly in urban areas, are more advanced; they may use ICT facilities for banking or e-commerce activities. Many telecentres also provide ICT training.

Box 6.2: Telecentres of Business and Information (TBI), Brazil

The 'Telecentres of Business and Information' program is different from other digital inclusion programs in that it is more socially oriented: it aims to provide spaces for conducting business activities. The program's objective is to strengthen competitiveness, increase profitability and reduce the closure of micro and small businesses by providing access to information, products, services and training courses available on the internet and on the resources offered by ICTs. That is, **literacy and digital inclusion were taken as a 'means' (as a stage of work), and not its purpose**. The program started in 2000, and now in 2009 it is in its third program phase.

A Telecentre of Business and Information is a physical space within an existing institution that represents and develops actions directed towards micro and small businesses. Their infrastructure is built on the computational and human resources necessary for digital literacy and on the use of extensive resources of the internet. Each TBI has a manager, with some monitors and assistants, and about 10 computers connected in a local network and to the internet. Other equipment is also available, such as printers, scanners, a fax machine, telephone, or television. By the end of 2008, the TBI network included an impressive 3,500 units.

The key resource for providing business content is the TBI Portal that introduced 'smart navigation' for the classification and presentation of business information. The actions of the program's Information Committee in organizing topics of interest for micro and small businesses, and the establishment of virtual communities were very important in terms of facilitating content provision.

The TBI Network now offers extension courses in Telecentre Management and Digital Entrepreneurship in the form of e-learning offered via a Moodle platform. The courses were developed specifically to train telecentre managers, for a total of 60 hours and with the support of specialist tutors. The content is available in five modules, with the intention to stimulate entrepreneurial potential and improve telecentre management practices. At the end of the course, students receive a certificate from the University of Brasilia. Since 2007, the course has trained more than 300 telecentre managers.

A management system of Telecentres of Business and Information has been set up for the TBI Network, to facilitate monitoring and evaluation. It is focused mainly on two functions: 1) to generate indicators for the TBI network and 2) to automate internal administrative activities of the telecentres. Even though it is still in development, the management system is already being used by 125 TBIs in the country.

Project TBI has benefited from the collaboration of an extensive set of partners, for a variety of purposes, including for: (i) internet connection, (ii) the donation of computers, furniture, printers, modems, fax, scanners or air conditioners, and (iii) for courses and training for professionals. Key partnerships were established with Caixa Econômica Federal and Banco do Brasil (two large banks) for the donation of computers; the National Research Council [1] for providing technical expertise for the project, and the Brazilian Service of Support to Micro and Small Enterprises, for the installation of telecentres and an ongoing discussion on methodologies and strategic planning. [2]

In 2007, the TBI program received a World Summit Award in the category digital inclusion (e-inclusion). This award is sponsored by UNIDO, UNESCO and the Internet Society.

[edit] Case study - Mapping content for telecentres by the Bangladesh Telecentre Network [3]

It is important for a telecentre network to invest in finding different sources of content and services and developing partnerships with various organizations to link them with telecentres. Recently, the Bangladesh Telecentre Network (BTN) has undertaken an initiative to map content

and services for telecentres. The BTN found that individual telecentres do not know who has what. Instead, they struggle to find relevant sources of content and services.

The Bangladesh Telecentre Network put together a small team comprised of a number of members with experience in content and services development for telecentres. At the beginning, BTN called for a members meeting and shared the idea of **content mapping**. The members attending the meeting identified dynamic sectors where they had demand for content by the community. The sectors are:

Agriculture	**Education**	**Health**
Employment and Skills Development	Environment	Law and Human Rights
Gender	Children	Citizen Services
Small and Medium Entrepreneur	Financial Services	Travel and Tourism
Lifestyle		

After finalizing the list of sectors, the team discussed how the various ways in which to present these types of content. Before starting the content mapping process, the team identified the following types of format:

Offline		
Text based	Text and Picture	Software-based learning material
Multi-media (Audio)	Multi-media (Video)	Multi-media (Animation)
Online		
Text based	Text and Picture	Software-based learning material
Multi-media (Audio)	Multi-media (Video)	Multi-media (Animation)
E-Book	Interactive material	Global Materials
Stand-alone player with TV		
Audio through audio-player [e.g. cassette player, MP3/4 player]	Video through video player [CD-player, DVD, player]	Animation through video player [CD-player, DVD, player]
Television		
Live broadcasting	(Digital) Video Recording, for delayed showing	
Radio		
Live broadcasting	Podcasting	
Projection Equipment		
Slide projector	Overhead projector	Bioscope
Mobile telecommunications		
SMS	Voice	Mobile software applications

Online content	Online applications (education, government, health).	
Hard Copy		
Book	Manual	Leaflet
Brochure		
Poster	Bulletin, Newsletter	

After developing a comprehensive matrix (See Appendix 6.3 for a detailed matrix template), the team developed a list of institutions with the potential to develop content in each of the sectors mentioned above.

The team later organized small sectoral meetings with organizations to brief them about the importance of content mapping and its benefit to the community. After the discussion, many organizations showed their willingness to support the initiative.

In the very first phase the Bangladesh Telecentre Network technical team helped the organizations to develop their content description and post it on the BTN website. Later, a small number of organizations started posting their information on their own.

As a result, BTN was able to develop a repository of 1,130 knowledge sources that are grouped under 13 categories. The outcomes were aggregated numerically as follows:

	Online Contents	Audio and Visual Contents	Printed Contents
Agriculture	41	43	535
Education	40	1	34
Health	10	-	30
Employment and Skills Development	19	-	45
Environment	5	11	14
Law and Human Rights	26	1	10
Gender	-	-	29
Children	1	-	21
Citizen Services	35	-	-
Small and Medium Entrepreneur	_	-	34
Financial Services	27	-	47

Travel and Tourism	8	-	43
Lifestyle	4	-	16
	216	**56**	**858**

A generic list of content and services that were requested by communities, and which could be provided by telecentres, included:

Government Services	
Services to be delivered to the people	Information service from the community
Access to government forms	Data collection for Bureau of Statistics
Birth and death registration	Voter and national ID card upgrade for National Election Commission
Citizen Certificates	Disaster damage report and list of affected people and household
Public examination results	List of poor people eligible to access government subsidies or special economic programs such as relief
Teachers enlistment status for government subsidy	Government surveys
Immigration information	Private and development partners' survey
Passport and visa information	
Government notices	
List of government divisions and departments working in a given region or administrative unit, along with the services they provide	
Special announcements	
Livelihood Services	
Newspaper reading	Disaster management information
Agriculture information	Social awareness information
Education information	Market price information
Health information	Consultations with experts using mobile phones and MSN messenger
Job information	Information dissemination through video

	and multimedia
Legal and human right information	Appropriate and Intermediate technology information
Small business development information	
Communication Services	
Internet browsing	Commercial mobile phone service
Email	Chatting
Internet telephony (eg. Skype)	Ring tone download
Video conference	Faxing (sending/receiving)
Capacity building services	
ICT Training	Online market place for rural SMEs (Small and Medium Enterprises)
Livelihood other trainings (handicrafts, rural business through video documentary)	Online courses (offered by universities, academies, etc.)
Ancillary services	
Computer compositions	Scanning
Photography	Laminating

This example of content mapping can be replicated in other telecentre networks, yet it is also important to recognize the associated challenges. Among them are limitations drawing from copyrights of the institutions and authors, the capacity of organizations to post online and, most importantly, the level of willingness to support a network.

[edit] Quick tips about Content and services

- Telecentre networks should regularly and systematically examine the needs of individual telecentres for content and services, in order to provide a collective expression of demand – known as a pull strategy.
- A telecentre network should deliberately promote content and services from different providers when it believes that they will be useful to some telecentres – a push strategy.
- Telecentre networks can help individual telecentres to assess the needs for content and services for their community – through methodology, advice, tools, etc.

- Community trust of content is important. Sometimes the organizations that are providing content are more important that the content itself. For example, medical content from an untrustworthy source may not be accepted by the community.

- Telecentres are now a key source of research data about local communities, and TCNs can help to channel that data in ways that benefit telecentres (for example, through data on connectivity in order to increase coverage).

- Government sources of information tend to be trusted. TCNs should try to bring more government institutions on board, for example, to provide e-government services.

- Telecentres by themselves often do not know where to access relevant content and services, so telecentre networks can be of great help to locate them. Rigorous content mapping is an important function of the network from an early stage.

- Various communication channels should be used to provide content and services: including offline, online, face-to-face, and print media.

- Some users may be illiterate, which should be taken into account (therefore more audio and video content is helpful).

- Some of the content and services may not be strictly developmental in nature, like in entertainment and news, but there will nevertheless be an audience for it.

- The increased versatility of mobile phones may add 'mobility' and higher personal access to the information.

- Telecentre networks will have an increasingly relevant function in providing exchange platforms for direct access or provision of content and services among users; that is, a kind of peer-to-peer marketplace for content and services.

[edit] References and Resources

Billah, M., Das, N. C., Hasan, M., Raihan, R., Sarer, T., and Uddin, M. F. (2007). Pallitathya: An Information and Knowledge System for the Poor and Marginalized: Experience from Grassroots in Bangladesh, D.Net

[edit] Web resources

Offline source of content - JEEON (www.jeeon.com.bd)

The Jeeon- IKB (Information and Knowledge Base) is a content database that has been developed in Bangla and is aimed at improving livelihood through ICTs. This CD version has been made for use in locations that do not have internet connectivity. The Jeeon-IKB responds to everyday queries such as what, where, who, and how in the areas of agriculture, education, healthcare, non-farming economic activities, appropriate technologies, human rights, awareness

and disaster management in simple non-technical language. The Jeeon-IKB is particularly suitable for rural users – even for those who are unable to read and write, with the assistance of 'infomediaries' (people who can use Jeeon-IKB to respond to queries). This also creates access to crucial information and thus reduces livelihood costs and improves income opportunities. The Jeeon-IKB is more effective when used with Teletathya: the people's telecentre (a mobile phone based information service), since whatever information is not available in the CD can be obtained by calling the specialists at the Teletathya Helpline. For more information, visit: www.jeeon.com.bd

Online source of content - Rice Knowledge Bank www.knowledgebank.irri.org

The International Rice Research Institute (IRRI) Rice Knowledge Bank (RKB) is the central repository for all IRRI's research-based rice science and rice farming knowledge that is relevant to the extension-farmer community. The IRRI RKB is also the model for similar RKBs in each partner country where the individual countries select, validate and modify rice-farming knowledge for their extension/farmer communities. The strength of the RKB community depends on developing a shared vision for the RKBs, a sharing of knowledge and exchanging information about technical issues. Now, different countries have their local language version of the knowledge base. For example, in Bangladesh, the Bangladesh Rice Research Institute has developed a comprehensive agriculture knowledge bank in Bangla, which is available at www.knowledgebank-brri.org.

Mobile phone based content source - CellBazaar: Market in Your Pocket (www.cellbazaar.com)

CellBazaar is a service from Grameen Phone that allows the people to buy or sell via mobile phones in Bangladesh. If anybody wants to sell something, they can post the information on CellBazaar through Grameen Phone, and buyers can contact them. If someone is looking for something to buy, or if they need a particular service (such as a tutor), they can look for it on CellBazaar and contact the seller directly. When a buyer sees an item that they like, they can call the seller, get additional information, and meet the seller to complete the transaction. CellBazaar is a platform for buyers and sellers to find each other. People can access CellBazaar by calling to a special short code number, sending SMS, using WAP or even online.

Audio-visual content source - Netbetar.com: Development net cast Website: www.netbetar.com

Netbetar.com, the first Bangladeshi internet broadcast radio channel hopes to reach all corners of the country via the thousands of telecentres sprinkled across rural areas. Development-focused entertainment through radio can help to bring issues closer to poor individuals, says the team behind the initiative.

Local knowledge repository - One Village One Portal: Towards Village Information Entrepreneurship

One Village One Portal (OVOP) is an initiative of GCC (Global Communication Center) aims to build a model of social information infrastructure where villagers can also be producers and owners of village information. Rather than using high-tech infrastructure and training, this model shows how villagers with their current skill set and their own devices can generate and broadcast information. In order to bridge the gap between their capability and the capability of their devices, a "bottom of the pyramid" (BoP) adaptation layer is introduced in the model. Villagers need ICTs to spread their voices. Indeed it can be argued that we need their voices as much as they do. Our step towards finding a way for villagers to develop, own and commoditize information is the One Village One Portal platform. The platform is capable of handling 85,000 portals for 85,000 villages in Bangladesh. However, we envision the OVOP as a prototype for other BoP villages around the world.

Education – National Program of Informatics in Education, Brazil.
Website: proinfo.mec.gov.br

One promising field for telecentre services via the support of telecentre networks is in formal and vocational education. One successful example of a program of excellence in education instrumented largely through telecentres is the National Program of Informatics in Education, an initiative of the Ministry of Education in Brazil. The approach has been to incorporate telecentres within Brazilian schools with the objective of improving education, and with the added value of benefiting their communities beyond students and education professionals.

Thematically-oriented telecentres

Telecentre Pesca Maré

Website: 200.198.202.145/seap/telecentro/html_2/Index_Apresentacao.html

This telecentre ensures the right to access to new technologies, expansion of relations, internet access and democratization of communication to ensure the digital inclusion of Brazilian fishermen.

Mineral Telecentres

Website: www.mme.gov.br/site/menu/select_main_menu_item.do

These telecentres promote the competitiveness of small mines (especially for those already organized into associations), cooperatives and micro and small enterprises in small regions or municipalities that have small mineral production as part of an important socio-economic base.

[edit] Appendix 6.1: Stories of Change in the Community

Impact on the community	A story to support the impact
Telecentres can **reduce the cost of livelihood** through accessing different	**A Farmer Saved his Crop using Information Services of Telecentre**

livelihood information and knowledge and ‘get-easy’ communication access.	Mr. Nurul Islam Khan produces rice along with beans, bitters and bottle gourds on his land. He is doing his best to make an honest living for his six-member family with an average monthly family income of USD $120. One day, he found that his cultivated beans, bitters and bottle gourds were attacked by harmful insects. He became worried and started consulting with his neighbours. His neighbours advised him to consult with a local agricultural field officer regarded as ‘block supervisor’, a post of Agricultural Extension Department under the Ministry of Agriculture. They also informed him that if he fails to get hold of the desired officer, then he can pay a visit to local telecentre to receive effective agricultural information services through various ICT channels. The urgency to receive effective agricultural advice made him look for the local block supervisor first, but he failed to get hold of him. Then he sought informational help from telecentre. He paid a visit to the telecentre and he chose to use the verbal information service from the CD content. Mr. Nurul Islam Khan applied the prescribed insecticides and dramatically got rid of his problems. Thus he saved his beans, bitters and bottle gourds and above all, his livelihood. According to his calculation, Mr. Nurul Islam Khan was able to prevent a total loss of USD $120 just by applying the received advice without paying any charge for the service offered by the Pallitathya Kendra. He thinks that information services provided by the Pallitathya Kendra can greatly save other farmers from potential losses.
Telecentres can create **new income opportunities** for the community. New income opportunities are created through gaining new skills on ICTs and information about new income opportunities.	**Alam gets job at a Bank** Alam, a 26-year old rural educated youth never even dreamt of getting a job at a local bank. The place where he stays is far from the main town, so it is hard for him to search for new employment opportunities. Fortunately, a local telecentre came forward to rescue him from this situation. Alam knew about internet browsing from the infomediary at the local telecentre. Browsing the internet at a local telecentre, he found a job advertisement in a local bank. He applied for the position through email. He was shortlisted and later interviewed. The bank authority publishes results online. Alam, thanks to the local telecentre, could get

	the dreamed result online. Now Mr. Alam is working as a Customer Relations Officer at BRAC Bank Ltd., Khatungonj, at the Chittagong Branch.
Telecentres can reduce the **risk of possible loss or damage** in a community.	**Phone call saved scores of Indian villagers from tsunami** The tsunami that struck the coastal communities of several Asian countries on 26 December, 2004, was made even more tragic as news began to break of how a handful of technicians, monitoring the progress of the waves across the seas using the latest ICT systems, found themselves unable to warn communities standing in harm's way. This was not the case with Vijayakumar Gunasekaran, a 27-year old son of a fisherman from Nallavadu village, Pondicherry, on the eastern coast of India, who works in Singapore. He had access to radio and television broadcasters on the morning of 26 December. Vijayakumar followed the news of the earthquake in Aceh, Indonesia as it unfolded over the radio and television in Singapore. As the seriousness of the disaster in Aceh sank in, he began to worry about the safety of his family living along the Indian coastline facing Aceh. He decided to phone home. Muphazhaqi, his sister answered the phone. She told him that seawater was seeping into their home when he asked what was happening in Nallavadu. Vijayakumar realized at once that his worst fears were rapidly materializing. He asked his sister to quickly leave their home and to also warn other villagers to evacuate the village. "Run out and shout the warning to others" he urged his sister. Her warning reached a couple of quick-thinking villagers who suddenly went to the telecentre where a public address system used routinely to announce sea conditions to the fishermen was housed. The warning from Vijayakumar, corroborated by a second overseas telephone call from Gopu, another villager working abroad, was broadcasted across the village using the telecentre’s loudspeaker. The village siren, which was available at the telecentre, was sounded immediately afterwards for the people to evacuate. No one from the village was killed as a result of the timely warnings. Nallavadu is home to 500 families and about 3,630 people. While all lives were saved, the tsunami destroyed 150 houses and 200 fishing boats in the village.

Telecentres can **empower marginalized community members** and can give a voice to the voiceless.	**Khadija is back to her normal life with dignity** Khadija Begam was married to Alamin Akon (a 28 year-old man), both from Mongla. Her husband got married for a second time without informing her. Khadija could not tolerate it and protested. That caused her to be physically and mentally abused by her husband. She had no choice but to move to her parents' house with her three-year-old daughter. She was helpless. Mr. Akon refused to pay any alimony to his wife. She knew about a mobile infomediary, who was working in a community telecentre, and called her one day. The mobile infomediary Nayan helped her to talk to a lawyer from a local human rights organization whose address and details was available at the telecentre where Nayan was working. After investigating the problem and consulting with Khadija, the lawyer sent a legal notice to her husband. After receiving the legal notice from the court, her husband got scared and rushed to the Union Parishad Chairman for a petition to compromise. But the UP chairman didn't respond to it, since the local telecentre routinely informs community citizens about their rights and obligations. The chairman told Ms. Khadija that if she withdraws the legal notice, he would take her back to his family. But Ms. Khadija was adamant and she wanted either a compensation of BDT 25,000 or a divorce between her husband and his second wife. She managed to find a job at a restaurant in Mongla to make an honest living with dignity. She found the telecentre to be as a good resort while in distress and relied on it later for other livelihood issues.

[edit] Appendix 6.2: Matrix for Content Mapping [4]

Types of Content		Agriculture	Education	Health	Employment and job	Environment	Law and human rights	Citizen and government services	Business information related services	Financial information related services	Travel and tourism information related	Disaster preparedness and management infor	Local level information	History and culture related information

											services	**mation**		
Offline	Text-based													
	Text and Picture													
	Software-based learning material													
	Multi-media (Audio)													
	Multi-media (Video)													
	Multi-media (Animation)													
Online	Text based													

	Text and Image													
	Software-based learning material													
	Multi-media (Audio)													
	Multi-media (Video)													
	Multi-media (Animation)													
	E-Book													
	Virtual reality													
	Global													

	Materials													
Stand-alone player with TV	Audio through audio-player [e.g., cassette player, MP3/4 player]													
	Video through video player [CD-player, DVD, player]													
	Animation through video													

	player [CD-player, DVD, player]													

[edit] Note

1. ↑ Which is similar in function to the National Science Foundation in the United States, or other similar national science and research bodies.
2. ↑ There were nearly 100 sponsoring and supporting organizations mentioned, most of them private companies, and a lesser number of universities and public (Brazilian) companies.
3. ↑ For more information, see the following web page:www.mission2011.net.bd/index.php?option=com_content&view=article&id=76&Itemid=101&lang=en
4. ↑ Source: Bangladesh Telecentre Network (BTN)

[edit] Chapter 7. International Telecentre Networks Collaboration

[edit] International Telecentre Networks Collaboration

Ndaula Sulah – UgaBYTES, Uganda

Telecentre people like to work, share and learn together. This occurs in a multiplicity of ways and intensities. Information sharing is often triggered by enthusiastic people who want to learn or by people who want to help their friends do better – either informally or formally. Together, these two groups form the creative core of any telecentre network. When these people are in managerial positions or have a high level of responsibility in telecentre networks, collaborations can quickly turn international.

Telecentre network collaboration is increasing as TCNs continue to encounter benefits from working together. It has helped in the establishment of new telecentre networks and in the strengthening others. Collaboration is also the foundation of telecentre.org community, a community of people and organizations working together to improve the social and economic impact of grassroots telecentres.

This chapter discusses the benefits of international network collaboration and the ways in which networks can collaborate. It also aims to examine the future of network-to-network collaborations and the extent to which the partnerships will be valued and used by members. It also highlights the example of the global **telecentre.org Academy** as a case study, which since 2008 has provided the ground for collaboration for networks and institutions in Spain, Colombia, Philippines, and Brazil among many others.

[edit] Potential and experiences arising from collaboration across telecentre networks

A telecentre network loses its capacity to support, analyze and strengthen telecentres as soon as it stops learning. That is why since 2005, telecentre.org has been at the front of fostering network collaboration and creating new networks. The broad aim of telecentre.org in this context is to connect people and networks, build social capital, facilitate partnerships and sow the seeds of new networks by regularly convening telecentre leaders and champions to share their knowledge.

The benefits of telecentre network collaborations may include:

- **New services and products** – Such as the telecentre.org Academy (as reviewed in the case study in this chapter);
- **Improving network operation** – Such as the Kenya Nework of Telecentres (KenTel) which developed its network strategic plan through collaboration with UgaBYTES;
- **Opportunities for network staff exchange** – For example, where networks from Burkina Faso and Mali collaborated to develop services and online resources;
- Alliances that require efforts for **multi-stakeholder resource** mobilization and bigger task accomplishment;
- **Solving problems** (short and long-term) based on information and knowledge sharing.

[edit] Emerging forms of international networking

The rise of telecentre network collaboration has taken three main stages, **personal connections, informal networks and formalized networks**. For example, the telecentre.org initiative has been supporting networks through the tranformation through these stages, where it now acts as a ‘clearance house’ for many telecentre networks and moving towards formalizing into a networks’ network.

In its beginning phase from 2003 to 2005, telecentre.org depended on personal connections and focused on information gathering and knowledge sharing at the global level. It was concerned mostly with skills identification and engagement from existing networks all over the world. But in the process, it built complex informal networks that would later lead to its present, already significantly formalized, stage.

At the launch of telecentre.org in 2005 there were very few TCNs, among them UgaBYTES in Uganda, Somos Telecentros in Latin America, SchoolNet in Bangladesh and the Telecentre Association of South Africa (TASA). The emergence of the telecentre.org initiative had a strong catalyzing effect, and since then, more than 45 telecentre networks or associations have been formed, some of which are included in the table below:

Réseau des Télécentres Communautaires du Congo, Congo Brazzaville www.telecentrescongo.org	Community Information Communication Support Centre (CAICC), Mozambique www.caicc.org.mz
Réseau des Télécentres du Burkina, Burkina Faso www.rtbf.org	Rwanda Telecentre Network (RTN), Rwanda www.ugabytes.org/rtn
Yam Pukri, Burkina Faso www.burkina-ntic.net	Sudan Telecentre Network, Sudan www.gedarefcity.org
Réseau des CMC en RD Congo, RD Congo	Tanzania Telecentre Network (TTN), Tanzania
Réseau des Télécentres Communautaires du Burundi	Bangladesh Telecentre Network (BTN), Bangladesh www.mission2011.net.bd/index.php
Mali Federation of Telecentres (FETEMA), Mali fetema.org	SchoolNet Foundation Bangladesh, Bangladesh www.schoolnetbd.org
Associação Telecentro de Informação e Negócios (ATN), Brazil www.atn.org.br	Nepal Telecentre Network (Mission Swaabhimaan), Nepal www.fitnepal.org.np
Commission on Information and Communication Technology, the Philippines www.cict.gov.ph	Telecentres Europe, Romania telecentreeurope.ning.com
Asociación de Telecentros Activos de Chile (ATACH), Chile telecentrosatach.ning.com	

The importance of informal networks cannot be underestimated, and deserve support and cultivation even if they are hard to manage, as exemplified by telecentre.org. Three types of networking modes can be highlighted in informal networks, namely advice networks, trust networks and communication networks. However, none of them operates in isolation, as illustrated by the example drawn from the Telecentre Times, below.

Box 7.1: The Telecentre Times: a case for international collaboration among networks

The Telecentre Times (www.ugabytes.org/telecentretimes) story is energizing as a success of inter-network collaboration. In 2005, telecentre.org organized the first Global Telecentre Leaders' Forum as a side event to the World Summit on the Information Society. In their leisure time, network leaders chatted and shared. Part of the many ideas that went around was one by D.Net, dnet-bangladesh.org, (Bangladesh), Sarvodaya www.sarvodaya.org (Sri Lanka) and

UgaBYTES www.ugabytes.org (Uganda)[1] to develop a project together. This continued on as a conversation lasting for about another year.

The idea to create a Telecentre Times magazine gained ground, and it would later attract support from telecentre.org for a face-to-face follow-up meeting in Sri Lanka, with advisory support from telecentre.org. The meeting was also attended by D.Net, which resulted not only in the establishment of the Telecentre Times, but also in the expansion of another telecentre.org project, the **Helpdesk**, for Bangladesh.

In the process of improving the English version, the telecentre.org team provided reviews and advisory support while the other networks took the role of collecting the articles, designing and disseminating the publication to UgaBYTES. Other networks also supported the editorial team at UgaBYTES. And through sharing lessons, other networks have now translated the publication into their local languages.

As the people involved got to know each other and built up trust, the process moved forward quickly and today the Telecentre Times is also published in French, Arabic and Bengali (in addition the initial English version). The process now requires minimal involvement of the initial players, while still benefiting from some telecentre.org support.

The Telecentre Times exemplifies a good exmple of a product of knowledge management achieved through inter-network collaboration. It captures periodical grassroots telecentre innovations, experiences, novel solutions and many more, and it globally disseminates them in a single publication, through regional networks, websites and mailing lists.

As a paper publication, it can be pleasantly read while sipping tea without having to turn anything on (except the light, if it's dark…).

Like when building a network, network collaboration thrives on trust and good relationships. It may be informal or informal. Networks need opportunities to develop the necessary trust as well as ongoing ways of nurturing and deepening relationships. Often, collaboration starts with a face-to-face meeting. Relationships grow faster when networks work together on a concrete activity of mutual benefit and maintain regular communication. They learn to understand and value each other more and more. Therefore, concrete projects such as the Telecentre Times have a kind of 'double value': as products of network collaboration as well as in sparking future collaborations among TCNs.

Effective network collaboration also needs leadership and mentoring. As we saw in the case of the Telecentre Times, telecentre.org provided resources for face-to-face meetings, occasionally facilitating online conversations and providing advisory support on a variety of issues. Additionally, telecentre.org encourages and facilitates documentation and sharing of experiences across networks involved in the publication.

[edit] Experiences in network collaboration

Networks (and thus their individual nodes) have much to gain from collaboration. As pointed out, together they find innovative solutions to challenges, develop new products, build up community development resources and strengthen institutional capacities.

In East Africa, UgaBYTES brought together network leaders and helped East African national networks like the Kenya Network of Telecentres (KenTel), Burundi Community Telecentre Network (BCTN), Tanzania Telecentre Network (TTN) and Rwanda Telecentre Network (RTN) to work more closely together. UgaBYTES contributed to the development of the mailing list and the website of the French network in Mali (Afriklinks), while Mozambique sent a representative on a one-week staff exchange program to Uganda in order to share experiences between UgaBYTES and the CAICC (The Community Information and Communication Support Centre in Mozambique). Telecentre networks in Latin America started a regular networking Skype chat in 2007. Community content facilitators based in Egypt, Peru, Uganda, India, Sri Lanka, Spain and Benin are also holding regular online chats to share strategies.

Networks have collaborated to create and manage telecentre helpdesks. Helpdesks are forums that enable telecentre practitioners to access support on demand. They use instant messenger (such as Skype, yahoo), emails, telephone and fax among other technology options. There are helpdesks in Portuguese (run by CAICC in Mozambique), in English (run by UgaBYTES in Uganda and the Bangladesh Telecentre Network), in French (run by Afriklinks, the Réseau des Télécentres du Burkina in Burkina Faso) and in Spanish (run by CEPES in Peru). Network leaders regularly discuss how to make the helpdesks effective, accessible and sustainable.

Bilateral, project-oriented collaborations are also occurring. One example involves Brazil's Telecentre Information and Business Association (ATN) and its exchanges in Mozambique for content adaptation (both being Lusophone countries) and capacity building programs for telecentre operators. The counterpart in Mozambique is the Eduardo Mondlane University (UEM) in Maputo[2], a pioneer in providing internet access that has also helped other digital inclusion initiatives.

[edit] Challenges to inter-network collaboration

Network collaboration can offer substantial benefits, but it is not without its challenges. Telecentre network collaborations are constrained by the fact that most networks are not at the same level of development, with some just in the emerging stages while others are well established, perhaps causing a barrier to fluid integration. For instance, it is a significant challenge to agree on procedures and requirements across networks at the stage of emerging large services, because most TCNs are in their initial stages, after all. Advanced members in this position typically feel that collaboration is less rewarding and does not provide mutual benefits. Let us examine other challenges for network collaboration:

- **Participation**: Most of the time networks actively engage in collaborating in activities of their choice and interest. But a few individuals and networks may appear to collaborate without actually contributing. This skews the process of sharing and learning. And its negative results end up reducing network collaborations.

- **Coordination and control:** There is a saying that everybody's responsibility is nobody's responsibility and that somebody will blame everyone for not doing something about that responsibility. In network collaboration there is a very big dilemma in resolving this phenomenon. Members are afraid that once one of them is chosen to coordinate, it is easy for that network to take the credit and in the end assume a controlling role. Or worse even, that once your network is picked to coordinate, you will have to perform all the work!

- **Inclusion and focus:** Most network collaborations draw on people interested in a specific part of the collaboration – such as about a telecentre.org Academy, staff exchange, or social enterprise models. This approach risks losing out on useful people who are not necessarily interested in several specific themes. A broader inclusion, on the other hand, opens up many opinions and perspectives, although it requires more complex coordination.

- **Process and structure:** Network collaboration may start from personal contacts and via informal processes before focusing on concrete actions. There is no standard time for network collaboration to mature. The one thing we know, however, is that if networks change the collaborative dynamics too early, the process may fail.

[edit] Case study – The telecentre.org Academy

The telecentre.org Academy is a global initiative to provide telecentre managers with ongoing training, capacity building, and professional development opportunities. Structured as a consortium of national academies and partners with a small global support unit, the academy supports and coordinates training programs, promotes the collaborative development and sharing of resources, and maintains accreditation and certification standards. At the global level, the telecentre.org Academy does the following:

- Establishes national academies in partnership with academic institutions, government, NGOs, and the private sector, and provides support for business and sustainability planning;

- Sets standards to accredit national academies and develops a certification scheme that recognizes telecentre managers' training achievements as well and skills gained through work experience;

- Supports the development of open curricula and promotes the creation, coordination, and improvement of common resources;

- Facilitates events, networking, and knowledge sharing activities, including engaging the community to contribute to a shared, multilingual repository based on UNESCO's Open Training Platform (to include curricula, certification standards, best practices, models, list of experts, etc.)

- Develops a web-based learning management system;

- Establishes partnerships to secure additional resources and support, encouraging other training organizations, technology companies and donor organizations to join as partners in the academy;

- Reaches out to governments and donors supporting telecentres to help them incorporate continuous and sustainable capacity building into their program design.

At the national or regional level, each academy localizes materials, delivers training, and links managers to ongoing mentoring and coaching opportunities. The telecentre.org Academy is a participatory initiative, where national academies and TCNs come together to determine the direction and activities of the global support unit.

[edit] Background

The telecentre.org program initiative was launched in 2005 with a commitment to developing the management capacity of telecentre practitioners and network managers around the world. It was clear that any initiative that would respond to this need would have to be owned by the telecentre community and be led by national networks. The initiative would need a multitude of reputable stakeholders like government, universities and other training and curriculum development bodies. Simply put, the initiative required more complex partnerships than could be developed in Ottawa (where telecentre.org was based), if the academy was to be a truly global training infrastructure.

For that reason, telecentre.org spearheaded discussions and provided grants for some networks that were picking up the idea. Involved networks shared their experiences through workshops, telecentre leaders' forums, and online spaces. Now, national academies have been established in Spain, Colombia, and the Philippines, which are to be followed by Peru, Chile, Brazil, Sudan, Egypt, India, and Mozambique with other academies in the pipeline. It is expected that by 2012 the telecentre.org-supported academies will have trained one million people.

[edit] How it works

The telecentre.org Academy is built on global network collaborations. It is focused on ensuring multi-stakeholder involvement and as such it has remained oriented to building trust and stimulating adaptation of its work to the needs of TCNs around the world. It fosters global debate through an open discussion forum at www.telecentre.org/groups/telecentreacademy, and it contributes training materials to the Open Training Platform run by UNESCO.It also professionalizes, motivates, and supports one million telecentre knowledge workers in the making.

Telecentre.org invites national TCNs to set up their own national academies, committing to help them establish a national-level training system for telecentre workers that use telecentre.org's Curriculum Commons resources. Thus, in the Academy, telecentre.org provides space to members as well as being an active partner, since it also contributes resources, materials and logistics.

[edit] Early Outcomes

The key result from the telecentre.org Academy so far is a strengthened operational capacity for hundreds of thousands of telecentre practitioners, as more networks incorporate the academy as part of their national training programs.

But other things have also happened as a result of this engagement. As an example, the international collaboration activities strengthen the bargaining power of the telecentre community, and it has therefore become simpler for national networks to engage with other partners like universities to support the training agenda of their telecentres.

[edit] Quick tips on international telecentre network collaboration

- **Embrace 'win-win' situations**. Right from the start, establish a give-and-take exchange as you begin to build a network. Let all the content for the interaction depends on what's happening in each participating network's objectives, strategy, brand, products, services and member experiences; such that everyone feels that he is gaining in one way or the other. The goal should be on how to increase your knowledge and how you will benefit your diverse members.

- **Create results and define processes aimed at successful relations**. In cases where you have meetings or collaborative engagements, design your meetings to achieve results, process and relationship success. Clear desired outcomes, agendas and effective facilitation to support results and process satisfaction.

- **Include members from diverse functions and industries**. If you have supporters based on a particular sector (and with differing job functions) include them; this cross-pollination of partnerships and functions adds depth and breadth to networks' communication and it creates diversity of thought, new perspectives, and alternative approaches to problem solving.

- **Build trust**. For meaningful collaborations to happen, there should be a certain level of trust between actors. However, trust takes time to build up: it cannot happen overnight, and everything that happens either builds or destroys the trust (where it´s easier to destroy than build). Using interactive collaborations tools to build and maintain trust as well as undertake collaborative works is the best way to get to know a partner.

- **Get your own website**. First, having and maintaining a website for your network is key to open up to the rest of the world. It gives you a communication platform for all that you do and a market to sell your ideas for whoever is interested. The telecentre.org website has proved to be one of its most powerful tools in enhancing collaborations.

- **Meet face-to-face**. Meeting people face-to-face remains one the most effective ways to work together, manage knowledge and develop trust. In the telecentre community, several telecentre leaders' fora – global, continental, regional, and national – have been

organized. Since they are expensive and time consuming, their objectives should be thought out carefully to justify the effort.

- **Take advantage of online social networks**. Today, one of the most common methods of networking is through online social networks. In general, the idea is to create a place where network leaders, members, and all stakeholders can meet to exchange experiences at the lowest cost: online of course. Some of these spaces include ning, Facebook, or Twitter.

- **Use online communication channels**. Once you have internet access, you may need to engage in cheap and powerful online communication channels like Skype (for voice and video)[3]. List servers/online fora remain essential communication channels that make it easy to share and collaborate ideas asynchronously, regardless of locations. Blogs provide a simple and yet powerful means of sharing and collaborating on key issues of network enhancement, from anywhere (as they are web based).

[edit] Note

1. ↑ In fact, the discussion started as a simple midnight talk between Ndaula Sulah of UgaBYTES and Harsha Liyanage of Sarvodaya in Sri Lanka.
2. ↑ See www.uem.mz
3. ↑ Skype, for example, is used for the African Telecentre Network Leaders' monthly meeting and the community facilitators' weekly meeting.

[edit] Chapter 8. Monitoring, Evaluation and Learning for Telecentre networks

[edit] Monitoring, Evaluation and Learning for Telecentre networks

Kemly Camacho

This chapter presents some of the basic elements for conducting an evaluation process of telecentre networks. Evaluation is not a fixed recipe, but should be tailored to each case; that is, the same design cannot be applied to all telecentre networks. But there are certain guidelines that can be observed for specific types of evaluations, such as those for development projects, political campaigns or, in our case, telecentre networks. For this reason, in this chapter we focus on one particular case, with an explanation of the main steps to be followed.

It is essential for a given evaluation to set out its specific purpose, questions, categories, variables and indicators, as well as tailor its methodology. This implies tailoring the data gathering techniques, analysis and dissemination of the results to the purpose and object of the evaluation exercise. An evaluation is basically a type of research that aims to provide inputs for

decision-making, and must therefore meet the same rigorous requirements as an investigative process.

[edit] Describing the Evaluation Process

Figure 8.1 outlines the evaluation process. The circles indicate the main threads, the arrows represent the flow between them, and the boxes show the main products of each process.

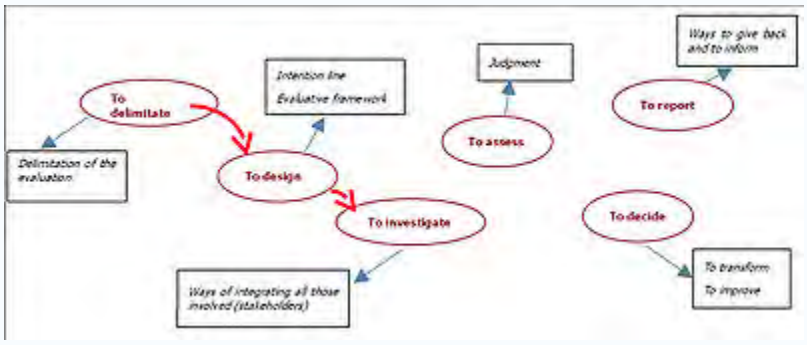

Figure 8.1 A Description of the Evaluation Process

Figure 8.1 represents an example of an approach to the evaluation process for a telecentre network. Some of the steps and questions can be applicable to the reader's own telecentre networks. The intention is to provide a useful reference as a guide for the elaboration of other evaluative processes that are adaptable to the needs of the specific network.

It is important to note the indicators presented within the evaluative framework. Due to the influence that the logical framework has had in the evaluation processes and the design of development programs, it has been assumed that indicators are "objectively verifiable values". Clearly, what we propose does not follow this traditional belief and bets on what is called "indicative indicators". These can be described as a series of statements that the person who designs the evaluation creates from his/her knowledge on the subject, to determine how a variable in the evaluated program or project is being addressed. These indicative indicators do not seek a rating or a measurement, but rather an assessment. It is also recommended that they are created in collaboration with the people involved in the project, in this case, with the telecentre network.

[edit] Demarcation I: Defining the entity to be evaluated

First, it is necessary to determine the boundaries for an evaluation by defining the entity to be evaluated, and its major guiding questions. In this case, we could define the 'object' as follows: **a development-oriented national telecentre network.**

This implies two things: that the objective is to evaluate a telecentre network, and thus the process does not focus on assessing the functioning of a single telecentre but rather the operation of telecentres as a network, including their support organizations. Moreover, this is an evaluation

process; that is, it is assumed that the network is functioning, or that it exists and is active at the time that the evaluation is being developed.

[edit] Demarcation II: Formulating evaluation questions

The questions asked help to set the boundaries of an evaluation. It is not possible to assess all areas of a given evaluation object. These questions help us to understand which aspects will be prioritized in the evaluation. An evaluation question is not just any question: it is analytical, investigative and cannot be only a descriptive one. An example of a main evaluation or research question could be formulated as [1]:

To what extent does the networking of telecentres improve the opportunities for the digital inclusion of people who have fewer opportunities to access information and communication technologies?

It is explicit in the question's formulation that what we want to evaluate is the influence that networking is having on social transformations through digital inclusion processes.

When conducting an evaluation, various areas of analysis may be chosen depending on the case, and they may be linked from the evaluative question(s). Make sure that the questions are evaluative and not descriptive; that is, that they are analytic. To put it more simply, the questions cannot be answered with a quick answer such as *"yes"* or *"no"*.

[edit] Design I: The evaluative framework

In order to carry out any monitoring or evaluation process, we must operationalize the key evaluation question(s). For this we create what is called the 'evaluative framework'. This will serve as a guide to operationalize the question and to determine how to evaluate the social phenomenon. The evaluative framework depends on what will be assessed (object), the time frame covered for activities (starting, on process, recently completed, completed some time ago), the type of evaluation (that is, if it is done by someone of the same network or someone outside the network), if it is participatory or not, among others.

Following a rigorous evaluation process, once the object and main evaluation question is defined, the latter is broken down into secondary questions, categories of analysis, variables and indicators (if applicable). Once the evaluation framework is designed, the methodology needs to be defined, including the evaluation approach and the related tools and techniques with which this will be investigated. One such evaluative scheme is detailed below, with the steps are illustrated in the table below:

Box 8.1 Example of an evaluative framework for a network of telecentres involved in development processes

Major analysis category: Networking

Secondary question #1: To what extent has networking improved the performance of individual telecentres?

Variables for the analysis of the question	Indicative indicators	Possible sources
1.Mutual support	a.When one telecentre faces a problem, other members of the network provide support; b.When a telecentre faces a problem it is sometimes supported by a few members of the network (but not always); c.When a telecentre faces a problem it is not supported by any of the other members of the network.	Surveys Interviews Telecentre stories
2.Knowledge sharing (KS)	a.The network is constantly sharing knowledge to help strengthen the network and its members; b.The network runs a knowledge sharing process from time to time but doesn't have permanent KS mechanisms; c.The network has not set up knowledge sharing processes among its members.	Surveys Interviews Telecentre stories Review of existing knowledge sharing opportunities
3.Joint projects	a.The network develops joint projects involving some of its members, eg. for capacity building processes, annual assemblies; service provision, etc. b.The network develops joint activities but doesn't have medium or long-term projects; c.The network members do not develop joint projects.	Surveys Interviews Telecentre stories Review of existing joint projects
4.Self sustainability for telecentres that are members of the network	a.The network favours telecentre sustainability strategies for its members; b.The network provides some elements for the sustainability of member telecentres but is not essential; c.The network does not provide elements for the sustainability of its members.	Surveys Interviews Telecentre stories Review of sustainability strategies
Secondary question #2: To what extent has networking enabled the integration of other types of support for the telecentres?		
Variables for the	**Indicative indicators**	**Possible sources**

analysis of the question		
1.Strengthening the support of other actors and stakeholders that are already involved	a.Networking enables telecentres to integrate with public, private, and civil society organizations that can help to consolidate the network; b.Networking identifies key actors from different sectors that have not yet integrated into the collaborative work; c.Networking does not yet have an impact on the integration of telecentres and other actors.	Interviews with actors from multiple sectors Surveys of telecentres Interviews with telecentres Telecentre stories
2.Integration of new actors and stakeholders	a.Thanks to the network, diverse social actors have been identified and are involved in supporting telecentres; b.Through the network, people have begun to establish contacts with potential supporters, but they are not yet involved; c.The network has not managed to connect new actors to support telecentres.	Interviews with actors from multiple sectors Surveys of telecentres Interviews with telecentres Telecentre stories
Secondary question # 3: To what extent has networking led to the positioning of telecentres at the national level?		
Variables for the analysis of the question	**Indicative indicators**	**Possible sources**
1.Visibility of the telecentre network nationwide	a.Networking has allowed for the telecentres to become key actors at national level; b.Networking has contributed to the visibility of telecentres; c.Networking has not yet contributed to the positioning of the telecentres nationwide.	Reviews about the definition of digital inclusion policies Interviews with people at various political levels Surveys of telecentres Interviews with telecentres Telecentre stories
2.Advocacy capacity of the network in technology public policies	a.The telecentre network advocates for, and is consulted on public policies for technology and digital inclusion in the country;	Reviews about the definition of digital inclusion policies Interviews with people at

	b.The telecentre network delivers an opinion in regard to technology policies and digital inclusion in the country; c.The telecentre network has not yet prioritized advocacy on public policies of technology and digital inclusion.	various political levels Surveys of telecentres Interviews with telecentres Telecentre stories
3.Clarity of the role of telecentres nationwide	a.The network is recognized as a key means for the digital inclusion of populations with little access to technology opportunities; b.The network is recognized at the national level but there is no clarity about its importance; c.The network is still not recognized as a key actor.	Reviews about the definition of digital inclusion policies Interviews with people at various political levels Surveys of telecentres Interviews with telecentres Telecentre stories
Secondary question #4: To what extent has networking encouraged organizational strengthening at the national level?		
Variables for the analysis of the question	**Indicative indicators**	**Possible sources**
1.Permanence of the network	a.The network faces several challenges and has been consolidated over time; b.The network is working properly but it still has to be consolidated in order to face complex challenges; c. The network is not strong and may be severely threatened if challenges arise.	Surveys of network members Interviews with network members Documentation of the network
2.Organization level of the network	a.The network has an organizational structure (formal or informal) which is apparent to all members; b.The network has an organizational structure (formal or informal) that is not so apparent to all its members; c.The network does not have an organizational structure.	Surveys of network members Interviews with network members Documentation of the network
3.Sustainability of the network	a.The network is self-sustainable; b.The network faces sustainability challenges but is advancing positively	Surveys of network members Interviews with network

	towards sustainability; c.The network is finding it very difficult to become sustainable.	members Documentation of the network

Box 8.1 Example of an evaluative framework for a network of telecentres involved in development processes
Major analysis category: digital inclusion

Secondary question #1: To what extent does the telecentre network support the digital inclusion of populations who have fewer opportunities?		
Variables for the analysis of the question	**Indicative indicators**	**Possible sources**
1.Populations are served by the network	a.The network is mostly serving people with fewer opportunities to access technology (for example, people who are elderly, handicapped, indigenous, housewives, farmers, etc.); b.The network is serving people with less access opportunities and other populations; c.The network is mostly serving people that have more access to technology conditions (young people, population with a higher educational level for example).	Surveys of the participant population Interviews with the participant population Focus groups Observation of the network members' spaces
2.Actions are tailored to people with lower levels of access to technology	a.Actions of the network members are oriented towards digital inclusion (ie. people and communities digitally excluded); b.Actions of the network members are oriented towards digital inclusion for any populations; c.Actions of the network members are oriented to the same services available in other similar venues.	Surveys of the final population Interviews with the final population Focus groups Observation of the network members' spaces
3.New relationships forged by the telecentre network between individuals who are socially excluded	a.The populations served by the network are able to develop and build new relationships; b.The populations served by the network make contact with new people and spaces. but do not give continuity to the relationships; c.The populations served by the network do not establish any new relationships.	Surveys of the final population Interviews with the final population Focus groups Observation of the network members' spaces

4.New income generation opportunities for excluded populations	a.The populations served by the network are able to develop new income generation opportunities; b.The populations served by the network become aware of new ways for income generation; c.The populations served by the network do not identify new income generation opportunities.	Surveys of the final population Interviews with the final population Focus groups Observation of the network members' spaces
5.New recreational opportunities for excluded populations	a.People served by the network count on new entertainment tools; b.People served by the network become aware of new entertainment tools; c.People served by the network are not able to identify new entertainment spaces.	Surveys of the final population Interviews with the final population Focus groups Observation of the network members' spaces
Secondary question #2: To what extent does the telecentre network encourage the development of populations who have fewer opportunities?		
Variables for the analysis of the question	**Indicative indicators**	**Possible sources**
1.Link between technology use and community needs	a.The uses of the technology promoted by the network of telecentres are in line with the needs, visions, and problems of people with lower levels of access to technology opportunities; b.Some of the uses of technology are in line to the needs, visions, and problems of people with less access to technology opportunities; c.The uses of technology do not meet the needs, visions, and problems of people with less access to technology opportunities.	Surveys of final population Interviews with final population Focus groups Observation of the network members' spaces
2.Transformation of communication processes of the region served by the network	a.Populations served by the network have modified and improved their communication processes at internal and external community levels; b.Populations served by the network have identified new resources for their communication processes; c.Populations	Surveys of final population Interviews with final population Focus groups Observation of the network members' spaces

	served by the network have not yet identified the potential of ICTs for their communication processes	
3.Transformation of information processes of the region served by the network	a.Populations served by the network have transformed their information processes and resources; b.Populations served by the network can locate new information resources; c.Populations served by the network have not yet transformed their information processes and resources.	Surveys of final population Interviews with final population Focus groups Observation of the network members' spaces
4.Transformation of knowledge processes of the region served by the network	a.Populations served by the network have modified their knowledge building processes; b.Populations served by the network have modified some aspects of their knowledge building processes; c.Populations served by the network keep the same knowledge building processes.	Surveys of final population Interviews with final population Focus groups Observation of the network members' spaces

[edit] Design II: The line of intention

When designing an evaluative framework, as the one used as example in Box 8.1, we are making a series of assumptions based on the knowledge of what the evaluation object is supposed to do or achieve. This set of assumptions, once validated with the appropriate stakeholders, becomes the so-called 'program theory' or 'line of intention of the program'. In this case, the program is a telecentre network, and some of the assumptions composing its line of intention can be stated as follows:

- Network implies a strengthening of each of its members through mutual aid, knowledge sharing and the development of joint projects;
- Networking increases and strengthens the amount of support that members of the network, and the network itself require;
- There is greater potential for impact on technology and digital inclusion policies, which positions telecentres as an option for people with fewer opportunities, because networking clarifies the role of these social actors;
- The telecentre network is aimed at meeting the demands and needs of a population with fewer possibilities of accessing development opportunities such as education, health, and income generation, among others;
- The population is indeed targeted and served by the network, and that the services offered are aimed to meet their needs, visions, demands; and in so doing it is adapted to the context of this [2];

- A true ICT integration in these populations will involve new communications processes, new information resources and therefore, new ways of developing one's own knowledge.

All these aforementioned processes will result in a greater recognition of ICTs as tools of opportunity and that a telecentre network can have an impact that produces a transformation in this population. All these assumptions that make up the line of intention are subsequently monitored and evaluated to properly identify them. The line of intention is usually not previously elaborated. Thus, before initiating an evaluation process, it is advisable that this line of intention is elaborated in conjunction with the stakeholders. This will be the basis of the evaluation.

Figure 8.2 presents the line of intention in this telecentre network. It outlines the way in which the network is supposed to help transform reality. It allows clarification of what we are trying to do when creating a telecentre network. As the reader can see, it is directly linked to the evaluative framework presented in Box 8.1 above.

Figure 8.2: Line of Intention or Program Theory of the Telecentre Network

Evaluation Framework

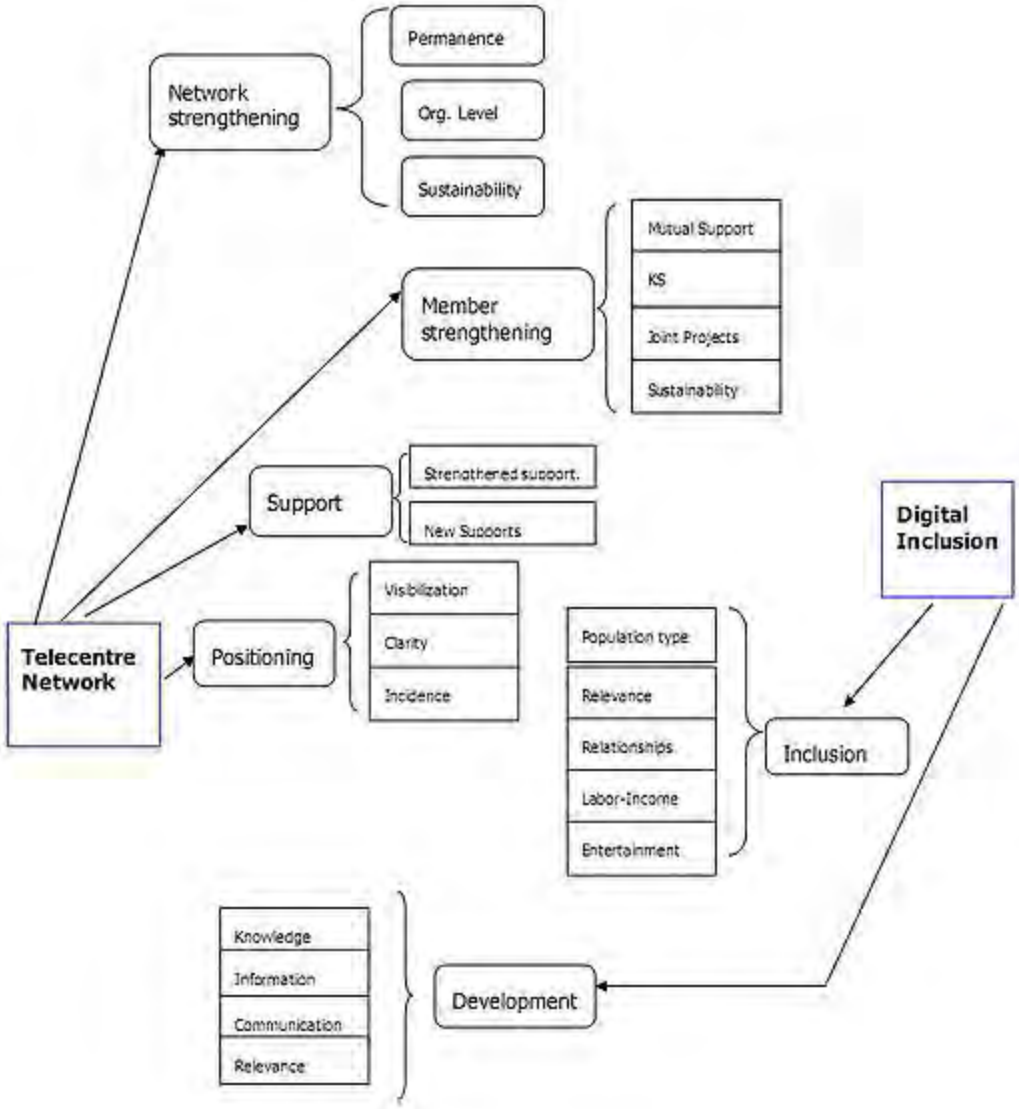

Figure 8.2 Line of Intention or Program Theory of the Telecentre Network

[edit] Research

Once the evaluation purpose, framework and line of intention are defined, the fieldwork for the evaluation of the telecentre network can be started. This involves using the sources described in the evaluative framework (Box 8.1) to retrieve the information and data necessary to make the assessment. This includes developing the right tools and methods to approach these sources.

Surveys, interviews, life stories or observation are instruments that require the development of particular tools and methods. For the purposes of this paper, these instruments will not be described in detail here, but is important to note that they must be designed before starting to capture information. It is also important to point out that each variable has its own associated techniques and instruments for data and information collection.

[edit] Assessment – responding to questions

How the data will be analyzed must also be determined in advance, for which quantitative, qualitative or participative [3] are necessary by integrating the involved stakeholders into discussions and analysis. The data analysis must respond to the indicators, variables, questions and categories previously designed.

It is important to think of evaluation as a research process that allows making an informed value judgment. As such, it is meant to provide guidance with the decision-making on, for example, (i) the correction or continuation of network activities, (ii) the most appropriate use of financial support, (iii) the integration of new support to the network (eg. local government or private enterprise) or (iv) changing the direction/the organizational transformation of the network.

[edit] Reporting back

A very important phase of the evaluation process is the presentation of results. This must be adapted to the language, media and various populations that have participated. It is the duty of the evaluator to present the results to each of the populations who have been consulted. In the case of telecentre networks, it is therefore important to report back to telecentre users, supporting organizations, and public sector, aside from telecentre managers and staff.

[edit] Risks

If the process presented here is not properly followed, a number of common mistakes can be committed, such as:

- Using the evaluation to control and punish, instead of to learn and improve;
- Understanding the evaluation as a measurement, rather than an assessment;
- Considering the evaluation as a “creation of indicators”;
- Considering that to “evaluate” means to “apply a survey”;
- Considering that to “evaluate” means to “collect successful stories”.

[edit] References

1. ↑ There would be other basic evaluation questions, such as those related to the support or benefits for the individual telecentres, etc.
2. ↑ This will transform the resources of these populations to establish relationships with various actors at national and international levels, which involve finding new opportunities related to income generation and use of leisure time.
3. ↑ participatory actions are highly recommendable in the case of a telecentre network

[edit] Chapter 9. Bringing it all together: Integrated network Management

[edit] Bringing it all together: Integrated network Management

Manuel Acevedo Ruiz

This final chapter attempts to do two things: it will integrate the topics we have explored separately to provide a coherent picture, and it will put forth additional guidance to expand the potential and impact of our telecentre networks.

[edit] How does it all come together?

In the previous chapters we explored the main issues that need to be paid attention to in order to make a telecentre network successful. While it may seem like a simplistic conclusion, the single most important message that emerges is that, **in the end, networks are about sharing**, including knowledge, resources, vision, efforts, risks, failures… Sharing is mostly determined by attitude: it is a disposition more than an obligation. Thus, sharing (and by extension good telecentre network management) can best be promoted, hardly enforced.

This does not mean that we should simply resign to hoping that the people and organizations that make up a telecentre network will have a spontaneously positive, generous and productive attitude towards sharing. We wish it could be that easy… but that is not what one naturally starts with, even if a good general predisposition exists between those that come together in a network. This guidebook has been prepared because **good intentions are not enough:** the purpose is to provide useful knowledge about creating a fertile environment for sharing in our networks.

[edit] Threading a networked path

The challenge for telecentre network managers, and other people directly involved in network-wide operations, is how to **deal with all the issues presented in the preceding chapters in parallel**: exercising a suitable governance style, taking measures to ensure financial sustainability, supporting telecentres to offer the right content and services, and so on, to occur simultaneously.

In fact, network management is not a linear path from A to B[1], since network structures are not linear. As we argue later on in this chapter, **the most productive networks are three-dimensional**. So making our way through the network involves going back and forth, and sideways, and up and down, and all combinations thereof. In other words, there is a destination (B) or more than one destination (B1, B2, etc.). The telecentre network manager[2] knows where he/she wants the network to go. Perhaps it is towards increasing the number of telecentres involved while diversifying sources of funding. Or it might be to stabilize a newly formed network, or finding out how to satisfy the demand for content and services to all member telecentres.

Regardless of the 'destination', instead of moving one step at a time in a straight line, the movement appears more like a **bouncing around within the network**. If we were to draw a path, it might resemble squiggles drawn by a chile: many short lines with multiples directions and without apparent shape.

Sound confusing? Well, just think that **you are probably functioning in that way right now**. As a network manager, you deal with many nodes (mainly telecentres) and with a variety of issues that affect both their individual operations and the interactions among them. One day you may go to some of the nodes (telecentres, or other organizations) to provide them with services, or to different nodes to get content, and still others to implement a new project.

Tomorrow you may get the same nodes involved in different network actions, new nodes to perform those same actions or a mixed pack altogether. The point is that you are moving in a networked environment, threading your way around, while attempting to **move the entire network in a specific direction**, that is, towards the network's objectives.

[edit] An integrated view of telecentre network management

The point is that even though a telecentre network manager may bounce around a lot while doing his/her work, there is a certain and definite direction in which s/he wants to move the network, that is, **toward its stated objectives**. We can assume that network members will reach a consensus on those objectives, so that all are reasonably in agreement in terms of what they would like the network to achieve.

While the aims may be clear, the path may be much less so. The fundamental responsibility of the network manager (and management team) is to set out the path and steer the network through it, through good analysis, proper decisions, and a collaborative leadership style coherent with a network environment.

This bears some similarities to steering a large sailing ship. There are a variety of sails, each with a different purpose and effect. In addition, the load of the ship, attitude of its crew, quality of materials being carried, and atmospheric conditions, etc. will contribute to determining how the navigation goes and whether the ship gets to its destination according to plan.

This guidebook has explored a set of issues that will determine to a significant extent how the network advances, and whether it will arrive at the port as expected (its objective). The network

manager, together with those responsible for its 'piloting', will activate and modulate tasks related to network governance, communications, financial sustainability, ICT policy, etc. in the most properly balanced way for smooth navigation. It has already been mentioned that each of these issues is important and that they need handling in parallel, but for the sake of clarity, we have examined them separately and in relative isolation. We will therefore now try to describe some of their relations and inter-dependencies.

Let us now consider each issue in terms of how it is affected or impacted by others:

- **Network governance**: This is clearly one of the key determinants of how the network operates, with strong links to how its members interact (participation and communication), while setting the playing field for business models (sustainability) and taking in significant inputs from the monitoring, evaluation and learning functions.
- **Financial sustainability:** If this is not achieved (at least partially), the network may be short lived, but that doesn't mean that it is strongly related to all internal network functions. The types and amount of content and services will strongly influence financial sustainability, as well as network governance (the 'rules of the game'). In a healthy network environment, it will need a significant participatory attitude from its members (internally), while it can both contribute and benefit from international collaboration (externally).
- **Participation:** Participation is one of the key defining characteristics of a network (without it, is hard to speak of a real network). It is the main channel for content and services and the basis for a well-functioning monitoring, evaluation and learning framework. It is also essential that the network adequately represents its members on ICT policy issues or for collaboration with other networks. It is hard to think of one area upon which it doesn't have a strong influence. It is therefore one of the most important processes to stimulate in order for good results.
- **Communications:** If participation is an embedded characteristic in all areas of the network, we could say that communication is the fuel (or the seed) that makes participation possible. And, like participation, it´s a sine-qua-non condition for a network – a set of non-communicating nodes does not make up a network. Communications, in turn, will be mainly enabled by adequate network governance, aside from the attitude of the participants and their cultural styles of course.
- **Content and services:** These can be seen, using developmental jargon, as the 'immediate objectives' of a telecentre network – or as Hasan writes in Chapter 6, they are the 'heart' of a telecentre network. Network governance generates content and services, possibly including various types. Even more importantly, content and services require participation from the members of the network. In turn, they will strongly determine financial sustainability of the TCN.
- **Monitoring, evaluation and learning (M&E and Learning):** This function aims at at improving other aspects of telecentre network management, allowing for modifications based on evidence. In other words, M&E and learning constitute the principal 'navigational' aid for the network to reach its objectives. It is a collective task and thus depends strongly on participation and communication. It is largely defined as part of network governance methods. While it will help to improve any aspect of TCN management, perhaps its most direct effect will be content and services (helping to

understand what people think of them); and network governance (by introducing adjustments to the 'navigation' itself).

- **International TCN collaboration:** This is a natural extension of networking done internally in the country. The results of that collaboration will be applicable to various areas but without a strong impact on any of them (as an external action, that impact cannot be guaranteed). Content and services or the work on ICT policy are areas that could possibly benefit the most. As for the internal drivers to get a TCN proactively involved in international collaboration, they are mainly participation (at least by some of its members) and network governance (setting the conditions to facilitate such collaboration).

Let us pause for a minute to reflect upon these interactions. For example, network governance and participation emerge as the single most determinant aspects of network management, since they have a strong direct influence on practically all other functions. Communication is slightly less critical although still important since it fuels participation and sets the level of dynamism (or 'temperature') of the network.

Content and services, as the key 'products' of telecentre networks, require actions on essentially all fronts. Its most significant measurable effect will be financial sustainability – the intangible effects will be a more satisfied membership that can easily point to the benefits of being a part of the TCN.

Financial sustainability and monitoring, evaluation & learning have crosscutting effects, where the first powers actions while the latter facilitates change. On the other hand, the outward management aspect of is also cross-cutting with both short and longer-term effects (though more geared towards the middle-term effects).

These considerations can and will change as a consequence of many factors, such as the maturity of a telecentre network, its political context, degree of heterogeneity or simply its size. Let's imagine a big, state-instituted TCN that is largely financed by the government in a country with essentially non-democratic institutions. Perhaps its role in ICT policy could the most salient aspect, but participation may be less of a driver for the network's success (in the sense of a participatory approach derived from stimulated individual imitative and not rigidly set).

In any event, and whatever the shape or form of the telecentre network, thinking about and driving the interactions of these areas of work is useful for managing a network properly. A TCN manager can base key decisions on expected consequences from the direct/indirect effects of such interactions. It will be as if s/he and her officers are facing a control panel of a modern ship, and can operate the various handles, levers and switches to set the most appropriate course for navigation. Let us explore these interactions a bit further in their network context.

[edit] Virtuous network effects

So far we have said that telecentre network managers have to skillfully navigate through their networks in order to stimulate or entice a whole set of actors (mainly telecentres) to **share enough** so that the network functions well and keeps members happy – and therefore, stay inside

the network. In order to do so, networks need to juggle a set of priorities, as discussed in the previous seven chapters. Fortunately, these priorities are not isolated, and handling one well often has a positive effect on others. This section explores these interdependencies and their related effects.

Some of the overlap that you will have probably noted while reading through the previous chapters is inevitable. The reason is that the issues are **inter-related**, sometimes strongly so. Let's take a simple example of a sequence to illustrate, recognizing that there are many possible combinations. Financial sustainability depends on the content and services provided by the network. Those contents and services will be strongly dependent on the level of participation in the network. The participatory scheme will be determined to a large extent by how network governance is carried out. And the capacity and ability of network management will inevitably depend on the financial resources available to the network.

Let us now look at a wider set of interactions, expanding on the key interactions between facets of management described in the previous section. For illustrative purposes, an indication of these interactions is reflected in the matrix below. We focus on a standard telecentre network, without any dominating or special features. Each cell is at the intersection of two issues, indicating how dependent the first one (located in the rows) is on the second one (located in the columns). For example, the cell Financial Sustainability intersecting with Network Governance indicates to what extent financial sustainability depends on network governance. Three values for the interactions are shown: highly dependent (red), somewhat dependent (lavender) and not very dependent (blue).

A detailed consideration of each interaction between each intersecting issue is beyond the scope of this chapter. It is instead meant to provide a simple visual approximation to the relationship between the various issues. Nevertheless, some reflections emerging from the exercise are worth mentioning:

- There is a relatively high level of inter-dependency among the various issues (few of the cells are blue);
- The relationships are not necessarily symmetrical. For example, the content and services provided in a network are highly dependent on network governance. However, network governance depends little on existing content and services;
- The matrix serves to quickly identify how a satisfactory performance in one category can have a range of possible positive indirect effects (besides the effects deduced from direct interaction), that is, the **virtuous network effects** alluded to in the title of this section. For example:
    - Communication depends strongly on participation;
    - Participation strongly depends on the style of network governance; and,
    - Network governance is strongly linked to monitoring, evaluation and learning.

	Financial Sustainab	**Network Governa**	**Participation**	**Communication**	**Content**	**Monitoring,**	**International TCN**

	ility	nce			and servic es	Evaluati on and Learnin g	Collabora tion
Financial Sustainabili ty							
Network Governance							[3]
Participatio n							
Communic ation							
Content and services							
Monitoring, Evaluation and Learning							
Internation al TCN Collaborati on							

So for example – and without taking the relationships too strictly or seriously…[4] – we could say that doing a good job in monitoring, evaluation and learning will have an indirect but real effect on communication and participation because of its improvements on network governance. For instance, this would be in addition to the direct effects on communication and participation strategies that can be directly drawn from applying recommendations from M&E and learning actions.

The cumulative effect of direct and indirect effects can become rather substantial because of the high number of inter-dependencies. This elevates the rewards for performing well on each of the categories identified for network management. And it points to the level of virtuous network effects that could be linked.

The matrix exercise provides only a rough approximation, perhaps a good starting point, for a finer level of analysis. Its results will certainly differ from network to network. But it is a valuable management exercise, one that we recommend to you – if possible, together with several of your colleagues in the network. Appendix 10.1 contains a blank matrix for you to print

out and analyze on your own – and compare it with the one we have discussed or with the ones prepared by your colleagues.

Box 9.1: What are the Seven Strategies for Building Successful Telecentres?

Here, the reader can find a different approach to consider network effects, this time applied to individual telecentres. It was posted to the telecentre.org intranet by Azul, who is the Head of Telecentre Excellence at Warisan Global Sdn Bhd, in Malaysia.

The image below indicates the seven strategies Azul considers most important for successful telecentres. She reflects: "What I consider important may not be important to you and vice versa. The way we 'chunk' things may also be different. We have many ways of "cooking" a telecentre dish."

Box 9.1: What are the Seven Strategies for Building Successful Telecentres?

And then she follows with a key message: "The Seven Strategies are connected with each other. Interdependent". This interdependency relates directly to our argument in this chapter that the various aspects for managing telecentre networks are inter-related and that there are virtuous network effects that can be derived from a truly integrated approach to TCN management.

telecentrecommunity.ning.com/profiles/blogs/7-strategies-for-building

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[edit] Note

1. ↑ Or A to M for that matter; we are not implying that the path is between two nearby points.
2. ↑ And hopefully everyone else in the network too.
3. ↑ Particularly when a TCN is relatively new, as it will be able to use guidance of other networks that are more well-established.
4. ↑ There are many jokes that exploit linking a chain of relations in a linear way. For example, about someone who likes the sea; a person who likes the sea will like walking on the seashore; someone who likes walking on the seashore likes to walk barefoot; someone who likes to walk barefoot probably has hippie-like friends; some one who has hippie-like friends will likely have listened to 60s US rock bands like the Grateful Dead, Jefferson Starship or the Jimi Hendrix Experience. But it would be quite a long shot to say thtat because you like the sea, you must be a Greatful Dead or Jimi Hendrix fan. :-D

[edit] Chapter 10. Looking to the future: Networks that empower

[edit] Looking to the future: Networks that empower

Manuel Acevedo Ruiz

In the previous chapter we explored the integrated nature of telecentre network management, taking into account the interaction of its various aspects. We also pointed out the significant and aggregated impact of network effects when those management aspects relate productively to one another. However, an important issue remains to be considered: how can we improve ways of working so that we can fully exploit the networking potential of TCNs? This chapter contemplates the road ahead in telecentre network management. And since this is a living document that will change via a wiki, this section will likely change accordingly. After all, the view of a road depends on where you are in it.

The question posed in the first paragraph implies that there are gaps in collaborative methodologies in network environments, and arguably this is often the case. Sometimes an entity that describes itself as a network actually follows traditional, linear practices. Or it has strict, hierarchical strings of power and control. In other words, it calls itself a network, but it does not truly act as one.

Let's take, as a hypothetical example, a telecentre network that is undertaking a project to extend educational content about the country's history from local stories and traditions. Through

observation it is determined that (i) only a small percentage of the telecentres actually gets involved, (ii) each participating telecentre provides content in whatever format it wants and (iii) there are no means through which to determine the assessment of the membership about specific submissions. The end result is nevertheless a reasonable repository of historical local content.

In spite of having carried out an activity ressembling network practices, the project will lack the power of the network to (i) include a wide participation from its telecentres (so that perhaps some of the best stories are missing); (ii) determine a proper way to prepare the content, so that stories and traditions are not presented in comparable formats and make it hard to process the entries; and (iii) include the opinions and judgements of the involved telecentres on the selected content. The final product will be less representative, have less quality, have demanded more work to produce and will have a lower educational value than could have been attained through a proper networked process.

In this concluding chapter we discuss network strategies that can help us get the most out of telecentre networks and examine some of the key challenges ahead in the short and mid term, such as:

- What strategies can help us to better collaborate (and more productively so) in telecentre networks?
- What kind of networks can best empower member telecentres, individually as well as collectively? and;
- What measures and policies could help the telecentre movement to advance towards a stable, firmly-rooted and networked future?'

Finally, let us mention that collaborative networking initiatives are not restricted to the social or development arena. It is increasingly reaching into the business and corporate environments as well. As Tapscott & Williams (2008) observe in the preface to their popular 'Wikinomics' book, *"Thanks to Web 2.0, companies are beginning to conceive, design, develop and distribute products and services in profoundly new ways"* (p. ix), and there are many examples of how companies are embracing this collaborative, networked style of working, from small upstarts to established giants such as IBM or Procter and Gamble.

[edit] Formulating a networking strategy for telecentre networks

Just like any for any type of organization, it is important to formulate the strategy of a telecentre network so it is best suited or prepared to meet the objectives it has set for itself. Formulating a suitable strategy for a particular TCN is therefore indispensable to obtain the best results.

A simple way to consider strategy formulation to optimize telecentre networking begins by considering four key elements, as indicated in Figure 10.1 (Moreno, Mataix & Acavedo, 2007).

a) Architecture refers to the organizational network structure, and will identify its members and their intended relationships (transactions). The architecture should be conducive and coherent with the emergence of a corporate networked culture favouring collaboration and horizontal working relationships.

b) Processes refer to the working procedures or methods to be implemented, or the modifications to existing ones, aimed at favouring networking (and in particular, collaboration). The ways of handling knowledge management and monitoring, evaluation and learning are among such processes.

c) Tools are the instruments or resources needed to implement the strategy according to the selected processes (and within the architecture already in place). Among the essential instruments for a successful networked strategy will certainly be a set of ICTs, but there are others: financial, physical infrastructure and facilities, events, etc.

d) Capacities refer to the ability to carry out selected processes using the tools at our disposal. It includes both human and institutional capacities. Specific individual and collective capacity gaps relative to tools (eg. ICTs) and processes (eg. knowledge management) should be identified and measures designed to address them. This can range from training on digital collaborative platforms (i.e. groupware) to training about monitoring methodologies.

Figure 10.1 Key Elements for Networking Strategy

This process requires a review of the aspects of TCN management as examined in Chapters 2 to 8 across these strategy elements, in order to determine with relative precision the elements of strategy that would be required to perform each management aspect satisfactorily. For example, when examining the aspect of participation, we can consider which components of the network's architecture, processes, capacities and tools need to be in place.

When the review is thus carried out for all management aspects, we will have arrived at the crux of a strategy to maximize networking potential for our TCN. The results could be displayed in a matrix form like that sketched below. At this point it is highly likely we will find that many components of those four network strategy elements will serve for more than one of our network

management aspects. For example, tools like content management systems and/or a web 2.0 type of community platform or groupware (like ning) will be applicable for participation, communication, content and services and M&E and learning.

	Architecture	Processes	Capacities	Tools
Financial Sustainability				
Network Governance				
Participation				
Communication				
Content and services				
TCN and ICT Policy				
Monitoring, Evaluation and Learning				
International TCN Collaboration				

[edit] Aggregating and Enabling networks

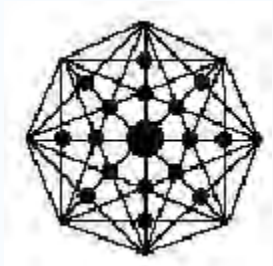


Figure 10.2 A Representation of a 2-D Network

In terms of overall orientation of a network towards collaboration, we can broadly speak of two models: **aggregating** networks and enabling networks. An aggregating network pulls together contributions from their members (eg. to generate a newsletter) or represents its members (eg. for advocacy purposes or to defend members' common interests). The connections in such networks are usually to either nearby (ie. similar)[1] nodes, or to the center node. In functional terms, their geometry is two-dimensional (2-D) or planar. Performance for aggreagting networks is measured in terms of joint actions undertaken by the network on behalf of the member nodes.

On the other hand, an **enabling** network seeks to strengthen the capacities of its members to achieve their individual objectives, particularly via collaborative tools and practices within as well as outside the network. The functional geometry of enabling networks is three dimensional (3-D) or spatial, where any node is free to connect with any other node, like the one in figure 10.2[2]. In this case, performance derives from the number of collective activities undertaken by member nodes and supported by the network.

Let's characterize the two types of networks to better understand how they compare in functional terms (Acevedo, 2009):

Aggregating network (2-D)	Enabling network (3-D)
The central or principal node acts as the network **coordinator** (as in a secretariat or coordinating unit); it largely determines which nodes will carry out particular functions/actions, and will know about these actions in advance.	The main node (if there is one) acts as a network **dynamizer** or animator, providing resources and tools to favor networked activities among other nodes.
Established **procedures** are very important: network operations are based primarily on a series of norms or protocol that give order and regulate the network's activities.	Network operations proceed in an **ad-hoc** fashion (given the freedom and ease to establish productive relations among nodes), while adhering to a few basic institutional norms.
Planning for the network is very important, since the central node (the 'coordinator' above) should direct resources and efforts towards their implementation. This determines a clear orientation towards input-allocation management.	**Periodic monitoring** is essential to know how the network is functioning, since it is not possible to plan all the possible collaborative activities among nodes. This points to a strong orientation towards results-based management.
The network prioritizes **access to information**; the central node fosters the availability of the information and provides access systems.	The network prioritizes **access to knowledge** through the communication among nodes, the relationship with external entities and the systematization of information. The main node (if there is one) works on shared criteria for knowledge management, prioritizing the provision of tools/services that facilitate the efficacy of knowledge management.

It can be argued that enabling networks offer more adequate environments in relation to maximizing the collaborative potential of networks. They are focused on strengthening each member in relation to the member's own objectives, primarily by providing tools/methodologies that favour the open collaboration of the members within the network (and also outside of it). This generates a much greater volume and range of collective, network-powered results than what could be derived from a network planned and directed by a central point. There are limitations to how well a coordinating unit can effectively and efficiently orchestrate the collective capacities of the nodes – and it will get more difficult as those capacities grow.

Moreover, by empowering their members to use networking methods to suit their specific purposes, enabling networks can encourage members' own initiative and responsive attitudes. In this respect, such a structure takes more advantage of network traits such as relational freedom

and flexibility. Conversely, embedding hierarchical practices into networked structures reduces the network's possibilities.

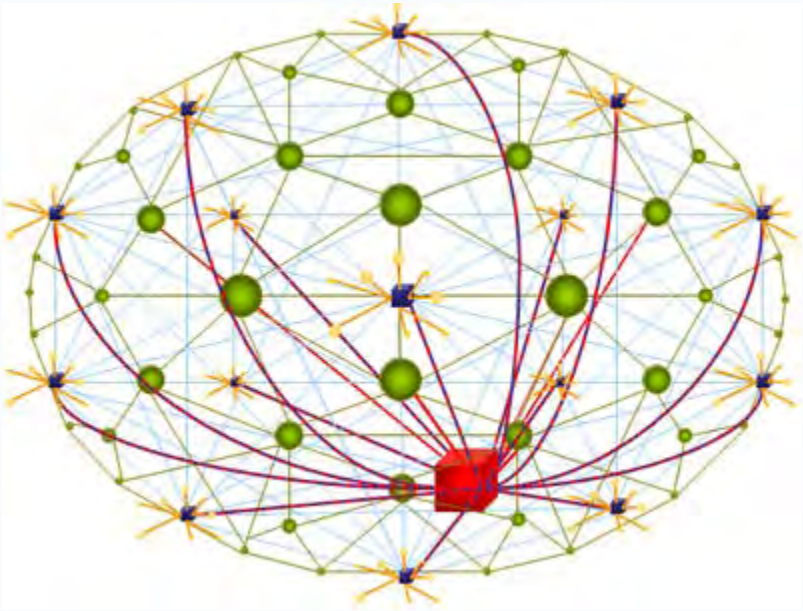


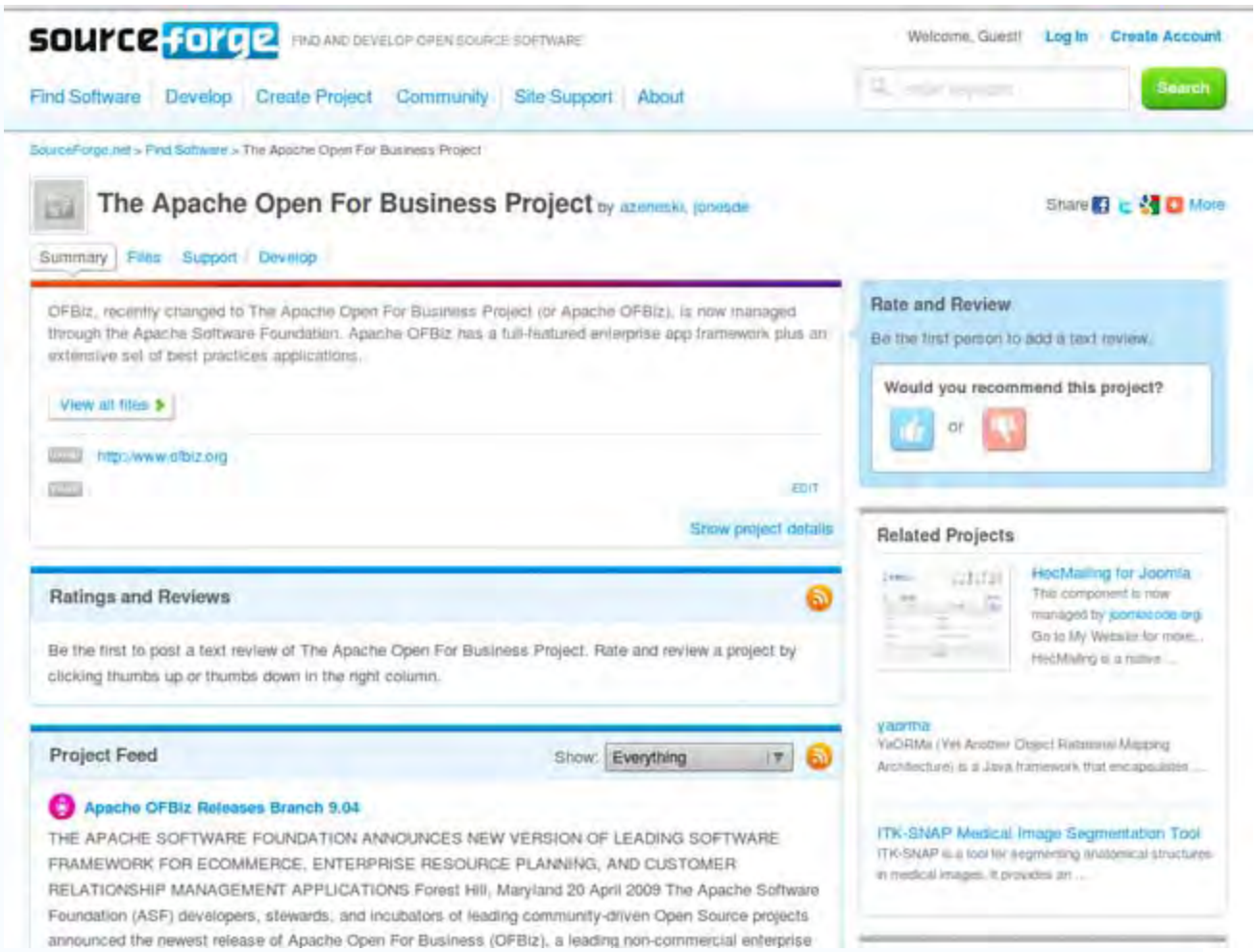
Figure 10.3 A representation of a 3-D or spatial network

Real development networks exhibit both profiles, activating desired traits as needed. For example, a TCN may follow a more aggregating approach when providing relevant information to its members, carrying out campaigns and acting as an important interlocutor to external governmental entities. However, when promoting projects, looking to expand resource mobilization or strengthening communications capacities, these networks act on their enabling mode.

Box 10.1: Examining examples of aggregaing and enabling networks

Aggregating Networks

Open-source programming networks. Most free/open-source software (FOSS) products are created by networks of skilled, volunteer programmers who use specific platforms and methods for program development (like 'SourceForge' in the picture). While the programmers will find support from the coordinators to make their work easier and more efficient, these networks are highly centralized. Essentially all the contributions from volunteers are meant to contribute to a single objective – the final software product. The network does not seek to deliberately strengthen the programmers (they are already rather skilled) nor their collaborative actitivies (collaborative methods are strictly set). Thus, these networks do not function in ad-hoc fashion; adherence to the procedures is mandatory.



Confederation of Spanish Development NGOs (CONGDE) (www.congde.org) CONGDE brings together NGOs in Spain that participate in development activities of all types. It is set up as a network, and some of its members are in turn regional networks that represent entities from parts of the country (Catalonia, Andalusia, etc.). Its mission is to coordinate and support the joint work of the member organizations. This is done through campaigns such as the one promoting the Millennium Development Goals, activities to educate the Spanish public about development, and most importantly by acting as interlocutor to the government and in policy-making fora. There are some services provided to members like training, promoting codes of conduct and information bulletins. So, while it exhibits some enabling traits, CONGDE functions more like an enabling-type network.

Enabling Networks

Association for Progressive Communications (APC) (www.apc.org) APC is possibly the best-known civil society organization in the Information Society and ICT for Development area. It is composed of country nodes, such as WOUGNET (Uganda), Colnodo (Colombia), GreenNet (United Kingdom), ArabDev (Egypt) or WomensHub (Philippines), represented in a Council, and it also has a small staff. While APC carries out corporate actions as an organization in its own right (eg. it was very active in WSIS), it is constantly supporting its members to undertake their own projects (at the national level) as well as collaborative actions among them, in areas such as communications/information policy, access to infrastructure, strategic use of ICT, gender and ICT, etc. So it is mostly an enabling network, though displaying some clear characteristics of a aggregating network as well.

International Year of the Volunteer 2001 (IYV2001) (www.iyv2001.org) The year 2001 was declared as the International Year of Volunteers by the United Nations to promote and visualize their contributions to development. The approach taken to operationalize its related activities was different than for other similar years. Instead of a few large events, it sought to energize the volunteer community worldwide to carry out a multitude of local and national events. For this, the UN Volunteers agency set up a small team in its Bonn offices whose responsibility was to enable and strengthen volunteer organizations worldwide to carry out IYV2001 related activities. An informal network of marked enabling characteristics emerged during a three-year preparation, in which people and institutions not only communicated with UNV's team, but with many others through the internet's platform set up for the year. The result was a resounding success, at almost no cost to the UN, and literally mobilizing millions of people worldwide.

If the assumption of favouring collaborative potential proves correct, then it is relevant to explore how to deliberately make the transition from aggregating to enabling network environments for TCNs. This entails focusing on the so-called generative capacities (Moreno et. al. 2007), mentioned briefly in Chapter 2 on telecentre network governance. These are new and essential capacities in a knowledge-based, collaborative context (like our telecentre networks). The applicability of generative capacities extends beyond the individual (although they may still be useful) and into the collective realm.

To promote and strengthen **generative capacities**, we can follow a two-pronged approach. At the member (telecentre) level, these are capacities that focus on (i) learning, (ii) systemic vision, (iii) collective leadership, (iv) collaboration and (v) feedback (ie. to the organization or the network).

At the institutional (network) level, generative capacities are improved by actions led at management level, and complementary to outcomes sought at the member level, such as:

- Producing flexibility in the modes of participation (so that 'weaker' telecentres or non-telecentre actors can also participate);
- Training telecentres on collaborative techniques;
- Promoting participatory monitoring and continuous feedback practices; and

- Designing projects as ‘networked’ initiatives.

Networks are ideal environments to foster generative capacities, since they favour sharing and collective commitment. In turn, such capacities also help to construct creative and productive networks.

A final remark about network strategy: a primary instance for participation, with a view to effective network management, should be precisely the time of determining its strategy. By the very nature of a network as a highly participatory organizational environment, the process of crafting its strategy should be open and participatory as well. Such a philosophy will not only result in a better strategy, but the process leading to it will already be developed as a practical exercise in common decision making – a very useful skill when working in networks. There are no tried-and-tested rules to set up and handle development networks. Much is learned along the way through trial and error. A truly participatory strategy then, despite some flaws and limitations, will have a stronger sense of collective commitment – including making the necessary corrections on the way.

[edit] Network analysis for telecentre networks

Even the best network management arrangements need to be validated, otherwise they can simply remain attractive institutional exercises with no clear return. The definitive measures for success will undoubtedly come from the results generated, both for the individual telecentres as well as for the overall TCN. However, a potentially useful previous step in assessing the success of a network (and possibly a decisive one in some cases) is to know whether we are indeed constructing and running the kind of network we had in mind. In other words, to respond to the question “What kind of network do we really have?” The answer to this question allows us to compare it with the intended design and clarify the direction we haven taken and are planning to move forward on.

For this we depend on network analysis, a set of methodological approaches, techniques and tools drawn from sociology that allow us to diagnose how a given network is functioning in order to manage it better. It’s similar to an internal organizational analysis often performed in companies, universities or government units, which helps determine whether they are set up as initially intended. This guidebook does not set out to provide a detailed design and instruction manual on performing a network analysis. However, it does encourage interested telecentre managers to consider exploring such type of analysis and describes briefly what may be involved – references are provided for further reading[3].

Network analysis provides us with an understanding of the relationships among the nodes of a network. It examines complex personal or inter-organizational networks to reveal underlying patterns that are easier to recognize and thus to possibly re-shape. It is based on the functional structure of the networks rather than on the attributes of its nodes.

In the case of a TCN, network analysis would focus on the relationships and transactions among the members (primarily the telecentres) rather than in the characteristics of the members (size, thematic orientation, urban/rural, etc.). This type of analysis gives us a relatively objective

determination on whether the network as a whole is functioning as expected and whether potential changes have occurred in terms of the relationships among the nodes in order to improve its performance.

There are different methodologies, and some will fit a particular TCN better than others. Anhier and Katz (2005) propose one for developmental (or more precisely, for NGO) networks, which could be applicable for TCNs. It includes five parameters to examine the relations among nodes, described in the following table together with one sample application for network management and for an individual telecentre:

Parameter	Network management group	Telecentre
Cohesion: characterizes the interconnection of social relations and their tendency to form areas of high relational density (hubs) where there are higher probabilities for links to exist or develop.	What action areas of the network are drawing the most participation?	Would it be possible for us to get involved in activities where few other telecentres participate?
Equivalence: describes to what extent the members of a network have similar relations with others, which helps to find zones or bands that facilitate the analysis by studying the relationships among those zones.	What are the different categories of network members based on their participation in the TCN?	Are some of our needs shared and already satisfied by other telecentres?
Prominence: identifies the prominent positioning of nodes in relation to others, which serves to visualize power relations.	How is leadership evolving within the network, and is it convenient to stimulate some capable but little active telecentre managers?	Are we leading work in an area which is of genuine interest for our community?
Bridge: identifies nodes that connect groups of nodes (or networks) not connected through other links or paths. Identifying nodes with stronger bridging attributes helps to visualize/understand information flows and mobilization processes among groups.	Which telecentres are pivotal in identifying project possibilities for others (including outside the TCN)?	Do we have links to organizations through other networks or associations that could be valuable for our TCN?
Agency: refers to situations in networks in which an actor observes the possibility of connecting empty spaces or nodes. This helps to characterize the enterprising role of some nodes in the establishment and	Who are the real innovators in this network?	What are the main unexplored aspects of content and services in the network, and where do we perceive demand

interconnection of networks.		from our users?

It is important to recognize that a network analysis exercise will only provide a simplified picture of the complexity of social relations that exist in institutionally-rich environment like that of a telecentre network. Also, the analysis can be as simple or as sophisticated as we want, selecting network attributes/parameters that we care about. The important thing, particularly for TCN managers, is to pinpoint trends in behaviour and functional patterns that can be contrasted over time (eg. over a five year period). The motivation is the same as for establishing network strategies in the first place: to have the most productive and effective possible TCN network.

[edit] Telecentre networks as national ICT policy actors

Telecentre networks are becoming significant actors in the definition and implementation of national policies dealing with ICT and the consolidation of inclusive information societies. This is because their telecentre members are involved in their day-to-day work at the community level, where they can play decisive roles in carrying out such policies and from where they can extract realistic expressions of popular ICT-related needs and demands to feed into the policy-making process. It is in the TCNs' direct interest too: telecentre networks can be important actors in ICT policy shaping and development, contributing to policies that may be directed at supporting and strengthening them.

Telecentre networks will mainly get involved in such policy processes from the perspective (and for the aim) of digital inclusion. TCNs can play a key role in ensuring that digital inclusion is at the core of any national policies related to ICT or the information society. Moreover, from a developmental point of view they can add to pressure ensuring so that that ICT policies become intertwined with national development policies. Telecentres themselves, particularly in countries that are carrying out large telecentre programs, are the subject of ICT policies in relation to extending ICT access and capacity across a country.

An example of how telecentres have become necessary actors for implementing ICT and information society related policies is the Brazilian 'Digital Inclusion Program' (Programa ID Brasil) of the Ministry of Communications (www.mc.gov.br). It aims to deploy telecentres in all 5,500 Brazilian counties, quite an ambitious target. Thousands of city halls around the country received equipment already[4], and they had the responsibility of establishing the telecentres, whose common and stated purpose was to contribute to the digital and social inclusion of their communities through access to ICTs. The focus has been on small cities and villages in the countryside with deficient telecommunication infrastructure and notable barriers to access. The Digital Inclusion portal (www.idbrasil.gov.br) contains data about the progress of the program.

[edit] Volunteer programs for TCNs

Many successful telecentres enjoy the involvement of volunteers, who can carry a variety of supporting tasks for their telecentre:

- To raise awareness about the telecentre it is important to understand the needs, problems and hopes of the various actors in the community, in order to determine what elements of information and ICTs may be more suitable. Frequent outreach to different groups and profiles of people will serve to make them more aware of the opportunities and practical uses of the technologies they can expect at their telecentre.
- For information brokering since it is essential to help users find the right information for their needs and thus to get immediate practical benefits from the telecentre. The same could be said in terms of services, such as finding the right type of e-gov application for the specific needs of a user.
- For basic ICT training, which is needed by many telecentre users, it is crucial to develop the skills for general use of computers, for creating content (eg. word processing), for viewing images (eg. digital pictures, scanning), and to use email and the Web. Some potential telecentre users may feel an initial 'fear' of computers, thus requiring ICT training to incorporate personalized attention and to be amenable – in order to learn to do things quickly which are fun and make people feel good about their progress.
- For building capacity, which takes place once the familiarity and basic skills are at hand. Meanwhile, it is important to ensure periodic monitoring of progress in applying the skills learned (and acquiring new ones) for well-defined purposes. Building capacity requires human interaction and understanding, which most effectively develop via direct and continued personal contact and exposure, something typical of volunteer work. Whether for advanced applications (website creation, digital video processing) or for simpler uses (eg. finding market price information using email), where volunteers can build and expand the capacity of each individual user so s/he can really benefit from accessing and using ICT products and services.

In other words, volunteers can help to achieve the most critical dimension of sustainability for telecentres; that is, social sustainability, by generating awareness, interest and ultimately demand from people in the community surrounding the telecentre. As such, volunteers are able to transform a 'technology access community center' into a 'local development center with access to technology' (Nath, 2001). The first is 'instrumental', essentially granting physical access to the internet and other ICTs, while the latter is 'transformational', promoting and supporting developmental processes with resources that include ICTs.

So what about volunteers and TCNs? Such networks are ideally placed to organize and manage TCN-wide volunteer programs[5]. They can be oriented to support individual telecentres as well as to directly support the TCN structure itself (for exmample, help desks, a national telecentre academy, etc.). Such volunteers can be onsite or online. Onsite (physical) volunteers can essentially be locals who are interested in what the telecentres do and who could benefit by collaborating with them (gaining technical experience, connection time at a telecentre, etc.). At the national scale, partnerships can be formed with universities or companies to promote such volunteer programs.

Online volunteers can also play a role. Specialized programs such as the UN's Online Volunteering Service (www.onlinevolunteering.org) provide the infrastructure and mechanisms so that people around the world can collaborate through the internet with development-oriented organizations. They can help in the provision of content and services (particularly for quality

control), designing websites, revising project proposals, adapting content, doing translations, moderating discussion fora, publishing e-bulletins, etc. The aforementioned website contains many examples of actual tasks performed by online volunteers. In fact we could envisage interesting possibilities for cooperation between onsite and online volunteers too.

[edit] Telecentres 3.0

A key book about telecentres was written in 2006: “From the Ground Up: The Evolution of the Telecentre Movement”. It came at a turning point, after WSIS, when telecentres started gaining wider support again, after having been all but discarded by major international development agencies in their digital divide agendas. It appeared at the dawn of the telecentre movement, which in fact it helped to describe [6].

In looking to the future, ‘From the Ground Up’ serves as a lucid reference for all of us. It starts with the following:

> “Most early telecentres started with a modest goal: giving people a chance to access and learn about technology. A telephone, a photocopier, a computer, the internet. Yet telecentres have evolved. It’s no longer just about access and skills. Today’s telecentres use computers and the internet to do everything from improving public health to extending education to a wider audience to strengthening local democracy. No matter what they are called—telecentres, community multimedia centres, telecottages, village knowledge centres, community technology centres, telehuts, internet learning centres, community access points, library computer labs and so on—they share a common commitment: to help communities enter the information age and embrace the knowledge economy on their own terms. This is the telecentre movement today.”

Figure 10.4. Cover of ‘From the Ground Up’

The concluding chapter, entitled Telecentre 2.0, identifies “**Seven things we still need (to scale up and scale sideways)**”:

- Flexible, responsive and innovative social investment mechanisms to support the establishment of new telecentres at the grassroots level.

- Well-packaged, easy-to-replicate community services for telecentres such as telemedicine, remote learning, financial remittances and e-government.
- Simple, proven social enterprise models that telecentres can use to generate community impact and financial revenue.
- Flexible, on going training and support for hundreds of thousands of grassroots technology activists around the world.
- Low-cost, easy-to-implement telecentre technology platforms, including affordable and stable internet connections for rural areas.
- Networks and partnerships that help good ideas travel far and wide —and help the telecentre movement reach a global scale.
- An enduring commitment to telecentres and other grassroots technology initiatives from all sectors: governments, businesses, development agencies and communities.[7]

We could say that the sixth point about networks and partnerships has advanced significantly, with dozens of national and cross-national telecentre networks around the world[8]. And yet we know they can deliver more than they do today – to take a deeper look at the how is the purpose of this guidebook. The intention has been for the previous chapters to assist in some way to advance on the other six points: how can networks help achieve that vision?

Three years later, in mid 2009, the telecentre movement has grown, with thousands of them springing up in diverse countries around the world. In India, the degree of telecentre growth is coherent with its vast scale: official policies focus on goals such as having as many telecentres that reach each one of its 600,000-plus villages, a tremendously ambitious objective. For successful stable growth (that is, sustainability), whether for large places like India or for other smaller countries or at the global sphere, **the key is networking**. This includes smart networking that goes beyond simply joining together and adding efforts. Creative networking builds on enterprising attitudes and innovative ideas. Productive networking, through a mix of art and science, transforms limited resources into changes that make a difference to people. Open networking encourages an inclusive approach to collaboration, an approach which 'adds and never subtracts'.

In looking ahead at the next two to four years (hardly any professional publication these days has a longer shelf-life) let us take a quick look at the Telecentre 2.0 precedent and propose factors for a vibrant Telecentre 3.0 stage (network-based, of course):

- Investment of public funds for telecentre networks (see the point below about building the 'public good' nature of telecentres) and encouragement of public-private initiatives to strengthen them (in terms of technologies, management, communications, etc.).
- Provision and delivery of content, services and other telecentre products via networked models, which can also move across networks (or countries).
- Decisive support and stimulus to social enterprise models for establishing and supporting telecentre networks, as well as for extending the range of telecentre offerings and services provided (eg. a social enterprise offering telemedicine services through the telecentres).
- Support for network training initiatives tailored to telecentres (including the telecentre.org Academy). Encouragement of educational offerings for and from telecentre

practitioners, including e-learning platforms that facilitate independent authorship (by telecentre staff or users), flexible course delivery and administrative tasks.
- Implement universal-service provisions managed nationwide through telecentre networks that deliver connectivity to telecentres which is free/low cost, dependable, hi-speed and ubiquitous. Mobile telephone infrastructure should be included to this end.
- Extension of telecentre networks to most countries (and among countries), with adequate telecentre network management methodologies, in ways to present TCN managers with one multi-actor, virtual 'global telecentre ecosystem' from where TCN members and partners can join.
- Integrate telecentres into national policies as (networked) public goods, and promote their role as publicly supported local development centres1. Introduce telecentre networks into wider development networks.

Throughout this guidebook, we have explored ways of **encouraging greater networking between telecentres** for the benefit of the men, women and children in the communities who will experience positive changes from the resources and support offered by their local telecentres. Its preparation has been a networked project in itself, with lead authors for each chapter that have been supported by others who have reviewed and/or provided some content, and a larger group in a dedicated section of telecentre.org, together with IDRC staff. We've all learned and will continue to do so through the debate and contributions to a new wiki book on telecentre networks. The initial version of this guidebook is simply the first contribution to a wiki that has an unending potential to grow. And throughout the process, a valuable asset is created: a type of networked social capital, the kind that stimulates collaboration across boundaries and extends collaborative opportunities limited only by the will and the imagination of those involved.

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[edit] Appendix 10.1 Matrix of inter-dependencies for Telecentre Networks

	Financial Sustainability	**Network Governance**	**Participation**	**Communication**	**Content and services**	**Monitoring, Evaluation and Learning**	**International TCN collaboration**
Financial Sustainability							
Network Governance							
Participation							
Communication							
Content and services							
Monitoring, Evaluation and Learning							
Internationa							

l TCN collaboratio n							

[edit] References

1. ↑ 'Nearby' is not expressed literally, related to physical location, but rather in terms of identity, affinity, etc.
2. ↑ As in: in comparison with 2-D networks where nodes typically interact only with nearby nodes.
3. ↑ Including Anheir & Katz (2005) and (2006), Arquilla & Ronfeldt (1999), Kilduff & Tsai (2008), and Nooteboom (2004).
4. ↑ A typical telecentre kit consists of 10 computers, together with a server, monitoring unit with security video, a wireless router, laser printer, multimedia projector. It also includes the needed furniture, ie. tables, desks and chairs.
5. ↑ In fact, international initiatives like telecentre.org could set up a type of "Telecentre Volunteer Exchange" facility, to allow people from successful telecentres to share their experience with others, given the proliferation of telecentres around the world.
6. ↑ "From the Ground Up" is relatively frugal in terms of text, and it contains many images. In an elegantly produced volume that can easily pass for a coffee-table book, it managed to convey the essential concepts weaved around its stories and pictures. It almost seems to be saying that "the stories themselves tell 'the story' " of the telecentre movement. It is accompanied by an online edition, and even a Flash version (see [http://ebook.telecentre.org/flash ebook.telecentre.org/flash).
7. ↑ ebook.telecentre.org/html/en/telecentre-2-0
8. ↑ Such as those participating in the telecentre.org initiative, such as Ugabytes, ATACH (Chile), the Bangladesh Telecentre Network, and many others.

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